THROUGH THE LOOKING GLASS – STRATEGIES IN ACHIEVING STAKEHOLDER PERFORMANCE

by

Emily Salmon
Bachelor of Business Administration, Camosun College, 2014
Master of Business Administration, Queens University, 2018

A Dissertation Submitted In Partial Fulfillment Of The Requirements For The Degree Of

DOCTOR OF PHILOSOPHY

Peter B. Gustavson School of Business

We acknowledge and respect the Lək̓ʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Lək̓ʷəŋən and W̱SÁNEĆ Peoples whose historical relationships with the land continue to this day.

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ABSTRACT

This dissertation thoroughly explores stakeholder value capture through three interconnected studies, collectively advancing our understanding of how community stakeholders systematically capture diverse elements of value over time. By challenging fundamental economic assumptions within value-based strategy theory and incorporating a behavioural theory lens, I develop a theoretical model to offer conceptual clarity on the concept of value capture, disentangling *potential* from *realized* value capture. The subsequent empirical studies test and build upon these theoretical advancements, with a specific focus on Indigenous communities impacted by nearby mining projects. In this context, I investigate the impact of contractual stakeholder governance, specifically the negotiation and implementation of Community Benefit Agreements, on community stakeholder value capture outcomes. Contrary to conventional wisdom, the findings indicate that contractual forms of stakeholder governance, particularly CBAs, do not consistently lead to higher value capture outcomes. Furthermore, the research reveals that stakeholders concurrently experience both value capture and destruction across various dimensions, challenging existing theoretical explanations. Expanding on these insights, the research then uncovers the diverse value capture strategies associated with achieving higher levels of value capture, finding that communities can capture value across varying levels of bargaining power while the ease of capturing value varies according to the type of value. This holistic exploration enhances our understanding of the determinants of stakeholder value capture, supplementing established explanations centred on bargaining power with innovative theoretical developments related to complementary resources and institutional contexts. Collectively, these studies offer a nuanced and comprehensive perspective on stakeholder value capture processes, contributing to the evolving landscape of value capture theory and practice.

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GENERAL INTRODUCTION

Recent theoretical developments within the strategic management field have altered our understanding of firm performance and how it may be measured (Barney, 2018; Coff, 1999; Lieberman, Garcia-Castro, & Balasubramanian, 2017). Expressly, scholars have shown that firms co-create value by garnering resources from different stakeholder groups, making these stakeholders residual claimants to the value created by this nexus (Barney, 2018; Gans & Ryall, 2017). This poses a challenge to the traditional measurement of firm performance, recognizing that a portion of the total value created by a firm may be claimed by external stakeholders, and not be reflected in conventional metrics of firm performance which predominantly portray value captured by shareholders (Barney, 2020). Thus, this dissertation aims to contribute to this emerging theory by exploring the process and mechanisms that contribute to stakeholder value capture, specifically, community stakeholders.

The core contribution of this dissertation is structured by three distinct articles, presented in Chapters 1, 2, and 3. While each article is presented as an independent chapter, they are intricately interconnected. Primarily, the theoretical advancements articulated in Chapter 1 are empirically tested in the subsequent Chapters 2 and 3. Additionally, these empirical articles share a common foundation, utilizing longitudinal census data focused on Canadian Indigenous communities in proximity to mining projects. The synergy among the papers is evident as they not only draw from shared theoretical underpinnings and empirical contexts but also demonstrate a cumulative progression in knowledge. Preceding the detailed exploration of the three articles, this introduction provides a comprehensive overview of the evolving value capture theory literature, the dynamics of Indigenous Peoples in the Canadian context in relation to mining projects, and concise summaries of each article.

Practical Contribution of this Research

At first glance, the Value-Based Strategy (VBS) literature can appear to be overly theoretical or abstract, or simply irrelevant for practitioners. However, this research has significant practical relevance to firms and stakeholders in today's environment.

First, from a theoretical perspective, this research offers practical advice to managers in their maintenance of long-term stakeholder relationships based on value capture outcomes. As the success of a firm is often dependent upon its ability to maintain long-term relationships with its stakeholders (Freeman, 1994), these relationships are vital, as stakeholders offer valuable resources to the firm which can be combined with other resources to create added value (Barney, 2018; McGahan, 2021). This dissertation posits that the continuation of this relationship is not solely contingent on the tangible benefits that the stakeholder receives, in other words, their economic and social value capture outcomes. Instead, equally pivotal is the stakeholder's perceptions of procedural and distributional justice throughout their value capture process. In addition, our findings illustrate that contractually securing or dividing value is insufficient, as stakeholders vary in their capacity to internalize or realize these value capture outcomes. This creates a tension for managers, as stakeholders' perceptions of value capture outcomes are pivotal in maintaining long-term relationships, yet stakeholders may not possess the required capabilities to effectively capture different value elements. Therefore, managers must be attentive to the process, distribution, and outcomes of their stakeholders, maintaining perceptions of fairness across these different stages, and offering value capture support when necessary.

Second, this research offers practical knowledge to communities and mining companies in the process of negotiating a community benefit agreement (CBA). Despite the several case studies that question or develop models to measure the long-term impacts of these agreements (Abedayo

& Werker, 2021; Szoke-Burke & Werker, 2021) our systematic understanding of *how* or *when* these agreements can be impactful is limited. Therefore, this dissertation presents actionable results that can support Indigenous communities in forming their relationships and agreements with various mining companies. It also challenges the widespread adoption of CBAs by mining firms, given their substantial negotiation and implementation costs, coupled with evidence indicating the limited added value of these agreements to community stakeholders. As such, the use of CBAs appears to be value-destroying in many instances, suggesting the need for alternative strategies to promote and ensure positive community value capture.

Academic Contribution of this Research

This dissertation also aims to make several significant contributions to the academy, specifically the emerging body of work on value-based strategy.

First, this dissertation offers important conceptual and empirical clarity regarding the concepts of value capture and value destruction. Within this work, value capture is theoretically conceptualized, and then empirically measured as *potential* and *realized* value capture, with this differentiation reshaping our understanding of established value capture theory and operationalization. Historically, these two terms have been confounded, resulting in an oversimplified understanding of the stakeholder value capture process (Barney, 2018; Coff, 1999). By conceptually disentangling these dimensions, it becomes evident that stakeholders not only differ in their negotiation capabilities, aligning with prior studies highlighting the significance of bargaining power (Stoelhorst, 2021), but also their *capacity* to capture value from a stakeholder nexus. This, I argue, stems from a stakeholder's possession of complementary resources. Notably, this conceptual separation prompts a shift in the empirical measurement of value capture,

necessitating longitudinal studies (Wibbens & Siggelkow, 2020) that empirically reflect a stakeholder's potential and realized value capture. This research also enriches our understanding of value destruction, which has been noticeably overlooked in existing research (Barney, 2020). Beyond empirically confirming instances of value destruction, stakeholder responses differ from those we would anticipate. For instance, the research reveals that stakeholders may simultaneously experience value destruction in one dimension (e.g. educational attainment) while concurrently capturing value in another dimension (e.g. income). This suggests the possibility of ambivalent value capture outcomes in which stakeholders simultaneously experience and perceive value capture/destruction across multiple dimensions. Such findings pose a significant challenge, an opportunity for extension, to previous research. Current knowledge suggests that stakeholders would either exit or renegotiate with a firm in the face of value destruction (Coff, 1999; Gans & Ryall), as this would violate the assumption that stakeholders must capture more value than they could independently produce (Gans & Ryall, 2017; Ramírez & Tarziján, 2018). However, this research not only finds evidence of value destruction, but also extends our understanding of stakeholder behaviour, as this thesis illustrates how stakeholders may remain in value destroying nexuses when they capture value in other dimensions, perceive the interaction to be procedurally and distributionally fair, and/or face contextual constraints that may limit their stakeholder exit.

Second, this research enhances our theoretical comprehension of stakeholder value capture processes and determinants. Traditionally, value capture outcomes have been linked to a stakeholder's pure and competitive bargaining power (Barney, 2018; Stoelhorst, 2021). However, this dissertation reveals that bargaining power is a vital factor, it alone is insufficient for achieving realized value capture. While a robust bargaining position may enable stakeholders to secure higher potential value capture outcomes in negotiations, this dissertation asserts that

complimentary resources are vital in transforming potential value into realized value capture. Not only does this research expand our focus to incorporate additional determinants of stakeholder value capture, but it also demonstrates how these variables interact with one another to produce value capture outcomes. Specifically, this research suggests that the explanatory strength of various determinants of stakeholder value capture (e.g. bargaining power, complimentary resources) varies depending on the *type* of value being internalized, highlighting the necessity for more holistic and complex perspectives of stakeholder value capture. Hence, the equifinality observed in value capture determinants and stakeholder strategies necessitates the incorporation of additional theoretical frameworks and methodologies to enhance our understanding of these processes.

Lastly, this research offers a novel illustration of how Indigenous methodologies may be intertwined with quantitative methods. The use of Indigenous methods has most often been limited to qualitative studies (e.g. Kimmerer, 2013; Kovach, 2010); however, this thesis builds off prior research to integrate Indigenous methodologies with quantitative data and methods in a culturally appropriate manner (Quinless, 2021; Walter & Andersen, 2016). Historically, quantitative research has often been applied in extractive and colonial ways, inadvertently overlooking or misinterpreting their data and findings, creating or perpetuating harms against Indigenous Peoples (Smith, 1999; Walter, 2010). However, by incorporating the principles of Indigenous methodologies, such as "a) empowering Indigenous peoples and governance systems in recognition of autonomy and self-determination, (b) knowledge cocreation in a safe and culturally appropriate manner, (c) privileging of Indigenous ontologies and epistemologies, and (d) the importance of recognizing past, current, and future relationships" (Salmon, Chavez, & Murphy, 2023, p. 467), I not only offer an *additional* lens to enrich our analysis, but also demonstrate a

more inclusive and respectful research process. This approach consciously recognizes the advantages (and limitations) of quantitative methods, while ensuring that the research reflects Indigenous knowledges, serves community interests, and contributes to the broader Indigenization efforts within the academy. In conclusion, this integrative approach is not only a methodological development but also a crucial stride toward conducting ethical, culturally informed, and holistic research involving Indigenous Peoples in management and organization research.

Indigenous Quantitative Methodologies

Indigenous Peoples have long been the victim of scientific research, prompting the emergence of Indigenous research methodologies. These methodologies prioritize Indigenous knowledges and voices, while working to serve the self-determined needs of Indigenous Peoples (Smith, 1999). Indigenous research methodologies are defined as an "approach to, and undertaking of, research process and practices [that] take Indigenous worldviews, perspectives, values and lived experience as their central axis" (Walter & Suina, 2019: 234). Although Indigenous methodologies have predominantly leaned towards qualitative methods (Walter & Andersen, 2016), the studies within this dissertation deviate from this trend, aiming to harmonize Indigenous methodologies with quantitative tools of analysis. In the section below, I explain common challenges and limitations to the use of quantitative methods in the context of Indigenous research, before explaining the rationale for using quantitative methods in this dissertation.

Quantitative approaches, often rooted in a post-positivism perspective, assume an objective reality to test the relationships among measurable variables (Gephart, 2004). With this assumption, the use of quantitative methods in Indigenous research may initially seem contradictory to the principles of Indigenous methodologies for several reasons. First, Indigenous research resists the

existence of an unbiased single reality; instead, Indigenous methodologies assume that a plurality of realities, one of which may be Indigenous realities, simultaneously coexist. Unfortunately, Indigenous voices and realities are too often silenced and marginalized within mainstream research (Smith, 2021). Second, quantitative methods rely on the abstraction of data from their specific context to a theoretical level, overlooking the importance of grounding data within place and people (Walter & Andersen, 2016). Furthermore, quantitative approaches struggle with data quality and accuracy concerns, with the lack of richness in numerical data making it challenging to convey Indigenous voices and understandings of "worldview, land, relationships, [and] identities" (Archibald, Lee-Morgan, & De Santolo, 2019: 9). Further, conversational and story methods allow Indigenous participants to determine what is important, and emphasize these elements through the selective sharing of stories and collective analysis (Archibald et al., 2019; Kovach, 2010). However, in quantitative approaches, the researcher independently determines what is important when gathering and interpreting numerical data, which can lead to data accuracy issues. Lastly, quantitative approaches may struggle to incorporate relational aspects or address the power imbalances inherent within quantitative methods, where the researcher has "final control over the research design, data collection, and interpretation" (Kovach, 2010: 125).

Despite these concerns, Indigenous Peoples are "highly numerate in how we understand our worlds" (Walter & Suina, 2019: 233), establishing a natural bridge between quantitative and Indigenous methodologies (Quinless, 2021; Walter & Andersen, 2016). Decolonizing approaches are not confined to a specific method, but are "grounded in a real sense of, and sensitivity towards, what it means to be an Indigenous Person" (Smith, 2021: 40). Therefore, non-positivist quantitative scholarship can unveil a plurality of realities, providing an opportunity to amplify Indigenous voices in research decisions (Walter & Andersen, 2016). Statistics, rather than being an unbiased

measurement of reality, are instead seen as a tool to “interpret reality and influence the way we understand society” (Walter & Andersen, 2016: 7), and may be utilized to reflect Indigenous realities in the research questions asked, and the interpretation of findings (Walter, 2010). In this way, the voices of Indigenous Peoples are not reflected through explicit stories (Kovach, 2010), but instead through data that reflects dimensions of their lived reality (Quinless, 2021). The numerical reflection of these lived realities then becomes a powerful tool in shaping the relationships and policies that directly affect Indigenous peoples (Walter & Suina, 2019).

Utilizing secondary data within quantitative methods also presents a particularly complicated set of challenges for Indigenous researchers. First, Indigenous research principles hinge on creating meaningful, reciprocal relationships with participants (Bullen & Flavell, 2020; Ellis & Earley, 2006). When researchers are hidden from participants – and/or when the identity of participants is hidden from researchers – it becomes challenging to uphold relational responsibilities. Second, the use of secondary data is inherently political, with census data holding a particularly long colonial and exclusionary history (Walter, 2010). Scholars can often become trapped in producing "mainstream Indigenous statistics [that] focus almost exclusively on items related to Indigenous difference, disparity, disadvantage, dysfunction, and deprivation”, also known as 5D data (Walter & Suina, 2019: 235). To avoid contributing to the further creation of 5D data, scholars are encouraged to use strength-based narratives, reflect the embodied realities of Indigenous Peoples lives, and support Indigenous nation rebuilding and sovereignty agendas (Quinless, 2021; Walter & Andersen, 2016; Walter & Suina, 2019).

In this dissertation, I navigated several tensions and challenges inherent in conducting Indigenous research using quantitative analysis with secondary data. As an Indigenous scholar, identifying as a quantitative researcher led to a sense of further isolation within the academy, not

completely fitting with Indigenous scholars (who almost exclusively rely on qualitative methods), or Strategic Management scholars (who lack a general awareness of Indigenous research). However, grounding myself as a *Cowichan* (versus Indigenous) scholar has allowed me to resolve these identity tensions, by appreciating the potential contribution of Indigenous quantitative research in empowering communities' decision-making processes, and supporting the translation of Indigenous realities to non-Indigenous audiences. Embracing my Cowichan identity has allowed me to ground myself within my *own* community's approach to knowledge generation. - Seeing elders and community members embrace statistical findings to help inform their understanding of community conditions and decision-making processes removed the stigma I felt when pursuing a quantitative approach. A core Cowichan teaching is "*Tl'i'to'mukw'mustimuhw"* (each person is important and equal), which acknowledges a respectful place and space for each person to offer their individual contributions to the community, with an understanding that we cannot exist without these different roles and gifts. In the same way, I have come to appreciate that each methodology is important and offers an opportunity to better our communities when applied with respect for Indigenous peoples, their rights and their wellbeing. It is the diversity of methodological approaches that offers us the greatest opportunity for strength and continued existence. Living and working in community has also emphasized the role of statistics in our communication with non-Indigenous neighbours, whether they be funders, state governments, or the broader Canadian society. Within these external relationships, statistics have the power to influence negotiations and secure community funds and benefits (or have these resources stripped). Statistics may portray our communities as strong, independent, and striving towards our 'good life' (or as lacking, and incapable of progress). Therefore, I embrace quantitative approaches when they reflect important and consequential knowledge activities within and for my own community,

and when they allow Indigenous communities to take control of how their reality is portrayed to neighbouring partners and organizations.

Another tension within quantitative approaches is the measurement and aggregation of data. The aggregation of data, specifically when trying to aggregate individual experiences to reflect community experiences, excludes individual community member voices within these numerical stories, and overlooks the diversity of experiences held. Further, quantitative approaches reduce broader theoretical concepts to measurable elements, which are determined by the researcher. This not only raises concerns related to data quality, but also questions whether the reduced indicators accurately measure the theoretical concept; in other words, if they have construct validity (Bacharach, 1989). While this dissertation operationalizes the concept of Indigenous wellbeing through numerous census indicators, several limitations exist with this approach. First, despite being based on the First Nations Perspective of Health and Wellness (FNPOW) framework (Quinless, 2021), this operationalization adopts a uniform conception of wellness, which is unable to adapt to variations in conceptions of wellness across communities. Second, it primarily reflects economic wellbeing due to data availability, raising concerns about the lack of longitudinal environmental, health, or cultural data. In the case of this dissertation and other quantitative research related to Indigenous peoples, the lack of relevant and longitudinal environmental, health and cultural data is not the choice of the researcher, but a choice of the government. This lack of highly relevant data is especially concerning given the Canadian government's responsibility to uphold Indigenous rights, as prescribed in historical and modern treaty agreements, Canadian federal and provincial legislation, and most recently in the United Nation's Declaration on the Rights of Indigenous Peoples (Gilbert & Lennox, 2020). Third, this operationalization aggregates individual responses to a community-level of wellbeing, obscuring

widening inequalities or disproportional impacts on marginalized individuals within communities. This limitation is especially relevant when interpreting the findings of quantitative studies based on available, government-generated data, where coefficients reflect the *average community effect* and are unable to speak to *individual effects* that may indicate growing social disparities, or differential effects for marginalized individuals.

Despite the tensions and limitations of quantitative methods mentioned above, a quantitative Indigenous approach was determined the most appropriate method for this dissertation. Although quantitative approaches abstract beyond the context of a single community, this abstraction enables a story to be formed that reflects the *common* experiences of First Nations communities in Canada. This approach offers a systematic analysis of the impact of CBAs at a national level; an analysis that could not be achieved through other approaches. Understanding these common experiences, based on the *best available* data, is vitally important in strengthening Indigenous decision making processes concerning new or ongoing resource extraction projects within their territories. Globally, Indigenous communities are frequently facing further encroachment of resource extraction projects within their territories (Lertzman & Vredenburg, 2005). Proponents of these projects emphasize the significant economic value these projects can create (Söderholm & Svahn, 2015), offering CBAs as a tool to minimize or offset externalities, and ensure a fair(er) division of benefits (O'Faircheallaigh, 2013). While Indigenous communities bear the greatest cost of these projects, facing significant environmental, cultural, and social harms (Herrmann et al., 2014; Sweet, 2013), they also find themselves at an inflection point with limited experience or data to assist them in determining how they respond to projects. Therefore, the findings from a large sample quantitative study, such as this one, have the ability to uphold Indigenous rights to free, prior, informed consent (FPIC) by ensuring communities are fully

informed about their decisions when engaging with a project (Hanna & Vanclay, 2013). By offering a systematic analysis, such studies may be highly useful when determining if and how the benefits and harms related to projects may materialize. Specifically, a quantitative approach helps uncover (a) how CBAs can impact different indicators of community wellbeing, (b) what conditions consistently allow some types of communities to benefit in these situations, (c) and if/how CBAs are an effective tool in distributing benefits to local communities. Such information is not only relevant for Indigenous communities, but also has significant implications for governments and firms who justify their projects based on claims that CBAs will deliver benefits to communities. Therefore, understanding the effects of CBAs in a numerical language understood by government and industry partners can present a strong narrative for Indigenous-centered changes in these relationships and policies (Walter & Suina, 2019).

Indigenous Peoples in Canada & the Mining Industry

This dissertation aims to explore community value capture outcomes through the empirical context of Indigenous communities proximate to mining projects in Canada between 1996 and 2021. The dataset developed for this research reflects community-level census data relating to social and economic indicators, over a 25-year period between 1996 and 2021.

In Canada, Indigenous communities are increasingly encountering resource extraction projects either within or in close proximity to their traditional territories. These projects aim to enhance both local and national economies by generating additional employment opportunities and economic transfers through the payment of government taxes, and royalty disbursements (Conde & Le Billon, 2017; Söderholm & Svahn, 2015). However, they also pose considerable challenges for local communities, as they are most impacted by the environmental and social harms

generated by the project (Conde & Le Billon, 2017; Cragg & Greenbaum, 2002). To establish a more equitable balance between the benefits and costs borne by local communities, firms are increasingly negotiating and implementing community or impact benefit agreements (CBAs) (O'Faircheallaigh, 2013). This strategy requires a considerable investment of human and financial resources, as community members advocate for specific benefits believed to outweigh future project externalities (Cascadden, Gunton, & Rutherford, 2021; Sosa & Keenan, 2001). It is important to note that not all communities are presented with such agreements, rather, the selection process is primarily influenced by the community's perceived risk and capacity for mobilization (Odziemkowska & Dorobantu, 2021).

Despite the growing rise of contractual stakeholder governance mechanisms, such as CBAs, our understanding of their relative impact on a broad range of stakeholders remains limited. This empirical inquiry aligns seamlessly with the theoretical exploration of how community stakeholders can capture value from their contribution of value-generating resources to a firm. Therefore, the empirical context of Indigenous communities, and their contribution of value-generating resources, offers a rare opportunity to conduct research that directly benefits the communities that provided their data, while making practical and theoretical contributions. Moreover, the dataset utilized in this dissertation is unique and offers additional possibilities for future research. The comprehensive matched sample comprises over 3,000 community-year observations spanning 25 years, significantly surpassing the sample size of previous studies in the field. Furthermore, the dataset extends beyond economic indicators to also reflect the acknowledgement that stakeholders capture a diversity of economic and social forms of value.

Overview of articles

In Article #1, I develop a theoretical model elucidating how stakeholders systematically capture diverse elements of value, encompassing both economic and non-economic dimensions, over time. In pursuit of this, I identify and challenge the core economic assumptions within value-based strategy theory, supplementing them with insights from behavioural theory. Consequently, the proposed model achieves two key objectives: (i) it theoretically disentangles the concepts of *potential value capture* (the external processes by which stakeholders identify, negotiate, and formalize their value capture claims within the nexus) and *realized value capture* (an internal process by which stakeholders transform and internalize value elements), reshaping our understanding of existing value capture theory and its crucial antecedents, and (ii) it brings about a significant shift in our comprehension of stakeholder decisions concerning continuation in the nexus versus potential exit, considering not only opportunity cost but more importantly, stakeholders' perception of fairness. Thus, this study aims to contribute to existing literature by providing an innovative perspective on stakeholder value capture processes, integrating behavioural theory to extend our theoretical arguments to encompass temporality and non-economic forms of value.

In Article #2, I ask: *How do CBAs contribute to community stakeholders' capture of social and economic value dimensions?* In other words*, how do CBAs, as a form of contractual stakeholder governance, influence stakeholders' value capture outcomes*? To address this question, I employ a quantitative approach that combines Indigenous methodologies with a difference-in-difference method (Callaway & Sant'Anna, 2021). This approach enabled the isolation of the unique effects of CBAs, and examined their impact on fourteen indicators related to social and economic dimensions of community value. The results reveal that: (i) contractual forms of stakeholder governance, particularly CBAs, do not consistently lead to higher value capture

outcomes, challenging the idea that higher bargaining power results in higher value capture outcomes, and (ii) stakeholders concurrently capture value, and have value destroyed, across various dimensions, prompting a reconsideration of established theoretical explanations regarding value destruction. This study contributes to existing literature by testing established theories, and providing empirical evidence of value destruction, and the distinction between potential and realized value capture.

In Article #3, I ask: *How do various contextual and stakeholder-specific characteristics give rise to distinct value capture strategies associated with achieving high levels of value capture*? This paper extends the insights from Article #2, delving deeper to explore the conditions under which higher bargaining power emerges as a prominent predictor of value capture. To answer this question, I operationalize a segment of the theoretical model developed in Article #1, quantifying a community's possession of complimentary resources. Embracing a configurational perspective, that recognizes multiple strategies may lead to higher value capture outcomes, this paper employs fuzzy set Qualitative Comparative Analysis (fsQCA) to identify specific configurations associated with higher economic value capture outcomes (Fiss, 2011). The findings reveal that (i) communities can capture value across varying levels of bargaining power, regardless of the type of economic value capture, (ii) the contextual complexity differs across various dimensions of value, implying that the ease of capturing value may vary according to the type of value, and (iii) there is overlap between configurations for the two dimensions of economic value capture, illustrating that certain pathways can concurrently lead to high value capture *across* dimensions. This study contributes to theory by enhancing our understanding of the determinants of stakeholder value capture, supplementing established explanations centered on bargaining power with innovative theoretical developments related to complementary resources and institutional context.

Finally, it is important to mention that article #2 was coauthored with Dr. Matthew Murphy (Gustavson School of Business – University of Victoria) and Dr. Kate Odziemkowska (Rotman School of Management– University of Toronto). Article #1 and article #3 are coauthored with Dr. Matthew Murphy (Gustavson School of Business – University of Victoria).

REFERENCES

Adebayo, E., & Werker, E. 2021. How much are benefit-sharing agreements worth to communities affected by mining? Resources Policy, 71: 101970.

Barney, J. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. Strategic Management Journal, 39(13), 3305-3325.

Barney, J. 2020. Measuring Firm Performance in a Way that Is Consistent with Strategic Management Theory. Academy of Management Discoveries, 6(1): 5-7.

Callaway, B., & Sant'Anna, P. H. C. 2021. Difference-in-Differences with multiple time periods. Journal of Econometrics, 225(2): 200-230.

Cascadden, M., Gunton, T., & Rutherford, M. 2021. Best practices for Impact Benefit Agreements. Resources policy, 70: 101921.

Coff, R. W. (1999). When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power. Organization science, 10(2), 119-133.

Conde, M., & Le Billon, P. 2017. Why do some communities resist mining projects while others do not? The Extractive Industries and Society, 4(3): 681-697.

Cragg, W., & Greenbaum, A. 2002. Reasoning about responsibilities: Mining company managers on what stakeholders are owed. Journal of Business Ethics, 39(3): 319-335.

Fiss, P. C. 2011. Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. Academy of Management Journal, 54(2): 393-420.

Freeman, R. 1994. The Politics of Stakeholder Theory: Some Future Directions. Business Ethics Quarterly, 4(4): 409-421.

Gans, J., & Ryall, M. D. 2017. Value capture theory: A strategic management review. Strategic Management Journal, 38(1): 17-41.

Kimmerer, R. W. 2013. Braiding sweetgrass (First ed.). Minneapolis, Minnesota: Milkweed Editions.

Kovach, M. 2010. Indigenous methodologies: Characteristics, conversations, and contexts: University of Toronto Press.

Lieberman, M. B., Garcia-Castro, R., & Balasubramanian, N. 2017. Measuring value creation and appropriation in firms: The VCA model. Strategic Management Journal, 38(6): 1193-1211.

McGahan, A. M. 2021. Integrating Insights From the Resource-Based View of the Firm Into the New Stakeholder Theory. Journal of Management, 47(7): 1734-1756.

O'Faircheallaigh, C. 2013. Community development agreements in the mining industry: an emerging global phenomenon. Community Development, 44(2): 222-238.

Odziemkowska, K., & Dorobantu, S. 2021. Contracting Beyond the Market. Organization Science, 32:3: 776-803.

Quinless, J. 2021. Decolonizing Data: Unsettling Conversations about Social Research Methods: University of Toronto Press.

Ramírez, C., & Tarziján, J. 2018. Stakeholder value appropriation: The case of labor in the worldwide mining industry. Strategic Management Journal, 39(5): 1496-1525.
Salmon, E., Chavez, J. F., & Murphy, M. 2023. New Perspectives and Critical Insights from Indigenous Peoples' Research: A Systematic Review of Indigenous Management and Organization Literature. Academy of Management Annals.
Smith, L. T. 1999. Decolonizing methodologies: Research and indigenous peoples: Zed Books Ltd.
Söderholm, P., & Svahn, N. 2015. Mining, regional development and benefit-sharing in developed countries. Resources Policy, 45: 78-91.
Sosa, I., & Keenan, K. 2001. Impact benefit agreements between aboriginal communities and mining companies: Their use in Canada: Canadian Environmental Law Association Ottawa.
Stoelhorst, J. W. 2021. Value, rent, and profit: A stakeholder resource-based theory. Strategic Management Journal: 1-26.
Szoke-Burke, S., & Werker, E. 2021. Benefit sharing, power, and the performance of multi-stakeholder institutions at Ghana's Ahafo mine. Resources Policy, 71: 101969.
Walter, M. 2010. The politics of the data: How the Australian statistical Indigene is constructed. International Journal of Critical Indigenous Studies, 3(2): 45-56.
Walter, M., & Andersen, C. 2016. Indigenous statistics: A quantitative research methodology: Routledge.
Wibbens, P. D., & Siggelkow, N. 2020. Introducing LIVA to measure long-term firm performance. Strategic Management Journal, 41(5): 867-890.

CHAPTER 1 (ARTICLE 1): A BEHAVIOURAL PERSPECTIVE ON STAKEHOLDER VALUE CAPTURE: THE GAP BETWEEN POTENTIAL AND REALIZED VALUE CAPTURE

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Abstract

Explanations of stakeholder value capture have long rested upon economic assumptions of bargaining power and zero-sum game theory, developing formulas based on "opportunity costs", "willingness-to-pay", and other quantifiable representations. But these concepts and processes represent a simplified version of reality, detached from the behavioural considerations that equally influence value capture outcomes. Therefore, I utilize a behavioural theory lens to explain how stakeholders can realize economic and non-economic value capture beyond the time and space of a single market transaction. To do so, I theoretically disentangle the concepts of potential value capture (PVC), the external processes by which stakeholders identify and negotiate for benefits within their environment, and realized value capture (RVC), an internal process by which stakeholders internalize elements of value. This new integrative model extends our current understanding of value capture processes by illustrating the mechanisms by which stakeholders can transform their PVC to RVC, and how the differences between these two concepts may prompt stakeholder exit or nexus stability.

Keywords: value capture, value destruction, Value-Based Strategy (VBS), Behavioural Theory

INTRODUCTION

Within the strategic management field, there is an increasing interest in exploring the value creation and value capture capabilities of stakeholders (Barney, 2018; Lieberman, Balasubramanian, & Garcia-Castro, 2018; Ramírez & Tarziján, 2018; Stoelhorst, 2021). For example, emerging theories such as value-based strategy (Brandenburger & Stuart, 1996), Stakeholder RBV (Stoelhorst, 2021), and the New Stakeholder Theory (McGahan, 2023) cumulatively aim to explain how a nexus of stakeholders emerges to create and distribute value between the various stakeholder groups (Barney, 2020; Coff, 1999). These theories distinguish between the concepts of *value creation*, understood as "the total economic value created by a firm" (Lieberman et al., 2018), and *value capture,* defined in terms of "how the overall surplus of value created by the coalition is divided among [stakeholders]" (Stoelhorst, 2021, p. 1493). To date, differences in value capture outcomes across stakeholder groups have been primarily explained in terms of competitive bargaining power (determined by market factors) and pure bargaining power (negotiation skills) (Bridoux & Stoelhorst, 2014; Ryall, 2013; Stoelhorst, 2021).

However, while prior literature explores the outcomes of these processes, such as identifying when value has been created or captured, the active processes through which stakeholders capture value remain underexplored. Bargaining power (whether competitive or pure) affects the outcomes of stakeholder value-capture. However, the overwhelming reliance on economic theory and assumptions within this literature (Gans & Ryall, 2017) limits our ability to explain value capture relating to non-economic elements of value or value capture dynamics across time. As firms create various types of value that are subsequently captured by stakeholder groups, such as economic value (Barney, 2020), social value (Kroeger & Weber, 2014), and cultural value (Dacin, Dacin, & Matear, 2010), it is crucial that our understanding of value capture process

account for these different value forms. The process by which non-economic value is captured is inconsistent with existing theoretical explanations of economic value capture, as social value capture occurs at multiple points in time and is synergistic, such that value capture can be greater than, or unequal, to value creation (Cabral, Mahoney, McGahan, & Potoski, 2019; Harrison & Wicks, 2013; Tantalo & Priem, 2016). Further, reliance on economic theory has overemphasized the predictive power of negotiations and contractual agreements (Barney, 2018), implicitly assuming that stakeholders are able to internalize these secured benefits consistently and homogenously across time, which is not necessarily the case.

Therefore, this paper aims to develop a theoretical model that explains how stakeholders capture diverse elements of value, both economic and non-economic, over time. In doing so, we propose the reconceptualization of value capture as two distinct elements: *potential value capture* and *realized value capture.* Specifically, potential value capture reflects the external processes by which stakeholders may negotiate and secure prospective benefits from the stakeholder nexus during the transaction, whereas realized value capture reflects the internal process by which stakeholders internalize and capture these benefits post-transaction. The separation of these distinct elements illustrates how economic considerations related to economic theory may predict a stakeholder's potential value capture; however, realized value capture is more accurately understood through the lens of behavioural theory. The remainder of this paper begins by reviewing the existing literature on stakeholder value capture processes and key theoretical assumptions. It then introduces and develops a dynamic theory of stakeholder value capture, drawing upon arguments within resource-based view (RBV) and behavioural theory. Finally, we draw upon several illustrative case studies to further illustrate and distinguish these concepts empirically.

PAST RESEARCH ON VALUE-BASED STRATEGY

Coff's (1999) model of stakeholder bargaining power was a foundational theoretical paper in the development of the value-based strategy (VBS) literature. This framework highlighted that an actor's ability to generate rents does not directly relate to their ability to capture these generated rents, thereby problematizing the assumption that value creation (rent generation) is equal to firm performance, as other stakeholders may capture part of the rent generated. Since then, scholars have expanded upon this idea to establish that multiple stakeholders (inclusive but beyond shareholders) contribute value-generating resources to the firm and may thereby become residual claimants to any added value that is created from the use of their resources (Barney, 2018; Coff, 1999; Peteraf & Barney, 2003). Although it is understood that stakeholders contribute their resources to co-create additional rents within the firm, the process by which these rents are divided and captured is primarily explored through an economic lens (Gans & Ryall, 2017). As such, existing theory implicitly relies upon economic assumptions and conceptions of value, such that economic transactions are the focal event in which value is treated synonymously with economic rents or monetary value.

As such, bargaining power has been the primary mechanism used to explain the level of value stakeholders capture from the nexus (Barney, 2018; Brandenburger & Stuart, 1996), which includes a stakeholder's competitive and pure bargaining power. First, a stakeholder's bargaining position is determined by their competitive bargaining power or the market value of the resources they possess (Coff, 1999; Molloy & Barney, 2015). However, it is the *relatively* of stakeholders' competitive bargaining power that determines the distribution of value among the nexus (Bridoux & Stoelhorst, 2014), not the strength of individual positions. Competitive bargaining power on its own is insufficient in explaining value capture outcomes, as stakeholders may differ in how they

utilize their competitive bargaining power, otherwise known as their pure marketing power or persuasive resources (Gans & Ryall, 2017; Stoelhorst, 2021). Despite having a strong competitive bargaining position, some stakeholders may either choose not to act on this positioning (Call & Ployhart, 2021) or be unable to "convince [their] counterpart(s) to cede some of the residual value that remains" (Stoelhorst, 2021, p. 10). For example, Call and Ployhart (2021) theorize how an "employee can perceive an idiosyncratic "fit" between the values of the firm and their own," creating a situation in which they voluntarily choose to accept less than their market value (capture less value), despite having a higher marketing bargaining power position (Call & Ployhart, 2021, p. 578). In addition, Harrison et al. (2010) describe how some stakeholders may be able to persuade others of the value of their resources, leading to situations of 'over-investment' in certain stakeholder groups, allowing them to capture more value than otherwise merited (Bosse, Phillips, & Harrison, 2009; Garcia-Castro & Aguilera, 2015; Harrison, Bosse, & Phillips, 2010). From these examples, it becomes clear how a strong, pure bargaining position can be used to over- or under-allocate value to specific stakeholders.

VBS theorizing is most often embedded within the temporal limits of a single market transaction and primarily considers economic elements of value. In early research, it was believed that value capture occurred and could only be observed at the time of exchange, requiring two discrete stages between value creation and value capture (Bowman & Ambrosini, 2000; Brandenburger & Stuart, 1996; Coff, 1999). This assumption is reflected within the field's foundational frameworks, such as Brandenburger & Stuart's (1996) value appropriation model or Peteraf & Barney's (2003) value creation model, which aims to explain the creation and division of value. However, these frameworks use common concepts such as price and cost to reflect measures of economic value and isolate their temporal focus to a single market transaction.

Although this characterization has been problematized when considering non-economic forms of value (Cabral et al., 2019), this assumption has remained central within subsequent research, as studies have limited their scope of attention to the differences in stakeholder outcomes at the time of the market transaction (Gans & Ryall, 2017; Stoelhorst, 2021). As such, recent research efforts have operationalized stakeholder value capture by measuring gains in economic value within a short-term transaction (Lieberman, Garcia-Castro, & Balasubramanian, 2017).

Although this research has aided in our understanding of the division of economic value within a market transaction, it has left the field ill-equipped to explain the complexity of real-world stakeholder value capture outcomes, which inherently include long-term value capture of economic and non-economic forms of value. This is a critical oversight, as firms often create and distribute social value to their stakeholders, which must be accounted for (Cabral et al., 2019). To address this limitation, we must acknowledge that negotiated value may not automatically be realized but instead that stakeholders may be heterogeneous in their capacity to internalize the benefits they negotiate for.

Key Theoretical Assumptions

Economic explanations of the value capture process hold several assumptions, primarily of zero-sum game reasoning, environmental scanning, and upper/lower limits of capture. First, the foundational economic models by Brandenburger and Stuart (1996) and Coff (1999) presented a transactional process in which value capture was a zero-sum game, whereby value captured by one actor inevitably reduced the value that could be captured by another. In the context of non-economic forms of value, newer concepts such as stakeholder synergy, defined as "the creation of value for two or more essential stakeholder groups, simultaneously and without trade-offs" (p.

135), illustrate the possibility for positive- or negative-sum games in which stakeholders may simultaneously increase their own value capture without reducing that of others (Tantalo & Priem, 2016). For example, a customer group may feel prestige (a non-economic form of value) by associating with a specific product, and the appropriation of this non-economic value would not detract from the prestige captured by employees for also being associated with the firm. Therefore, this framework does not adopt a zero-sum game assumption, allowing the possibility of value synergies to occur.

Second, stakeholders are assumed to be actively searching their environment and able to identify possible alternatives, labelled the assumption of unrestricted bargaining (Brandenburger & Stuart, 1996). However, recent calls to incorporate behavioural theories into strategic management theories illustrate the need to challenge these assumptions as they do not necessarily reflect actual practices within organizations (Powell, Lovallo, & Fox, 2011). Specifically, behavioural theory emphasizes that in practice, a "decision maker brings a cognitive base and values to a decision, which create a screen between the situation and his/her eventual perception of it" (Hambrick & Mason, 1984, p. 195). Specifically, Hambrick and Mason (1984) emphasize that it is cognitively impossible for employees (and other stakeholders) to continuously scan their environment and instead make sense of their environment through their unique lenses and use behavioural strategies to identify and focus on specific environmental areas. Therefore, this framework acknowledges that stakeholders differ in their ability to scan their environment and identify possible alternative arrangements, according to different behavioural and cognitive biases.

Third, the amount of value a single actor is able to capture is limited to both an upper and lower boundary, as value capture outcomes outside of these parameters result in stakeholders exiting the nexus (Brandenburger & Stuart, 1996). In the lower boundary, stakeholders need to

capture the minimum amount of value they could capture in their next best alternative, labelled the *consistency assumption* (Gans & Ryall, 2017; Ramírez & Tarziján, 2018). In other words, actors must be able to benefit equally, or more than, their opportunity cost. In the event they are below this threshold, they will no longer be motivated to contribute their value-creating resources to the firm as they would be better off on their own and will withdraw their resources from the firm. This assumption is problematic as stakeholders may be unaware of their opportunity cost when their resources are co-specialized (Barney, 2018). At the upper boundary, actors cannot capture more value than what they have contributed to co-creating, called the *feasibility assumption* (Gans & Ryall, 2017; Ramírez & Tarziján, 2018). In other words, if an actor captures more value than their resources have contributed to creating, then this would "steal" value from other actors, creating a violation of the consistency assumption for other stakeholders and destabilizing the nexus. Theoretically, this becomes problematic as "because of co-specialization in the bundle of resources, the marginal productivity of each resource in the bundle often cannot be estimated precisely" (Barney, 2018, p. 3316). Empirically, there are numerous examples which violate these assumptions, such as the recent phenomenon of quiet quitting, in which employees reduce their commitment and work output while continuing to collect their full wages (Anand, Doll, & Ray, 2023), or the known and prevalent issue of employee shirking within work teams (Jones, 1984).

Many of these foundational economic assumptions are connected and reinforce one another. For example, the consistency assumption relies upon the assumption of unrestricted bargaining, as it requires the notion that stakeholders can objectively determine the amount of value they could capture from different alternatives. Therefore, stakeholders must have the cognitive capacity to not only identify possible alternatives but also determine the value distribution of those alternatives. Another example is the rationale for the feasibility assumption

and its reliance upon the zero-sum game assumption. The feasibility assumption exists to account for stakeholder shirking in a zero-sum game, in which value captured by one stakeholder automatically creates lower value capture outcomes for the other stakeholders. However, if we acknowledge that value synergies may occur, it becomes impossible to objectively determine not only the amount of value created by a single stakeholder's resources but also any upper limit that might begin to infringe on the value capture of other stakeholders.

A RECONCEPTUALIZATION OF VALUE-BASED STRATEGY

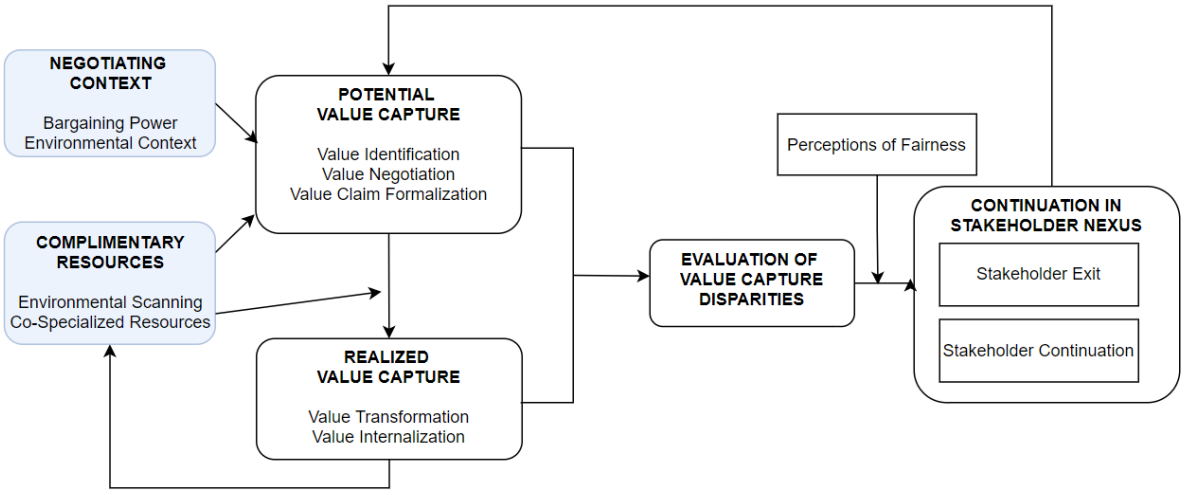
Building upon the research summarized in Table 1, we define value capture as the process by which stakeholders negotiate and internalize value from the stakeholder nexus in excess of the value they could capture at their next best alternative. This definition deviates from prior research in two critical ways. First, value capture is understood as a more inclusive concept that incorporates the two interrelated yet distinct elements of potential and realized value capture. Second, including these two distinct subcomponents enhances our understanding of the value capture process and allows for the consideration of time effects. These deviations are important, as the previous sections suggest that prior literature is limited in explaining value capture processes and outcomes when adopting longer temporal periods and accounting for non-economic forms of value capture. Within the remainder of this section, we conceptually dissect our understanding of value capture to identify two distinct elements, that of potential value capture (PVC) and realized value capture (RVC), into a broader model (Figure 1), which can better account for non-economic value capture and value-capture processes beyond the market transaction.

Table 1: Value Capture: Conceptualization, Definition, and Operationalization

Concept	Conceptualization	Literature Definitions	Operationalization
ANTECEDENTS			
Residual Claim	Stakeholders may have possession of resources that can be co-specialized into resource bundles that generate excess rents, to which fixed claims cannot be made.	Co-specialized Resources "Stakeholders have a residual claim when payments for making their resources available to a firm do vary with the actual economic profits generated by a firm ex post… Residual claimants agree, in these incomplete contracts, to be compensated for the resources they make available to a firm after all of a firm's fixed claims are paid" (Barney, 2018; p.3308)	A residual claim has not been operationalized in empirical research but is assumed. For example, Barney (2018) states that residual claims occur when "there is uncertainty in supply, when quality is difficult to ascertain, or when purchasing [the resource] requires transaction specific investments" (p.3312).
Bargaining Power	Stakeholder bargaining power is reflective of their relative power gained through the ownership or access to competitive and persuasive resources.	***Competitive Bargaining*** reflects the bargaining power of a stakeholder's resources "determined by market competition (i.e., the law of supply and demand)." (Stoelhorst, 2021; p. 1497) ***Persuasive Bargaining*** reflects a "sociopolitical process, where anything that a player may use to convince its counterpart(s) to cede some of the residual value" and is informed by formal and informal institutions (Stoelhorst, 2021; p. 1497). *Informal Institutions*, such as shared norms, allow stakeholders to negotiate for additional value based on normative beliefs. *Formal Institutions*, such as legal rules and regulations, allow stakeholders to negotiate for additional value based on regulatory requirements.	Bargaining power has not been operationalized in empirical research but is assumed. *Formal institutions*, and their role on value capture, has been empirically examined within the context of firm ownership and labour regulations (Ramirez & Tarzijan, 2018).
VALUE CAPTURE			
Value	Stakeholder value is anything deemed valuable by the stakeholder themselves.	Common areas of Stakeholder Value Stakeholder utility that emerges from (1) actual goods and services provided, (2) organizational justice, (3) affiliation, or (4) perceived opportunity costs (Harrison & Wicks, 2013 p.103) Definitions of Value "Value is defined as the financial worth or usefulness of a given resource" (Call & Ployhart, p. 574)	Value operationalized as Wages Tax revenue Firm Profit (Lieberman et al., 2017; Ramirez & Tarzijan, 2018)

		"We therefore propose that the value created through a business model is an outcome that meets an actor's business or personal needs" (Freudenreich, Lüdeke-Freund, & Schaltegger, 2020, p. 8)	
Value Capture	The process by which stakeholders negotiate and internalize value from the stakeholder nexus, in excess of the value they could capture at their next best alternative.	Inclusive of opportunity costs "Defining … "rents" as payments in excess of opportunity costs to stakeholders supplying resources to the firm" (Stoelhorst, 2021; p. 1492) Amount gained from the nexus "Value capture—which is notably distinct from value creation—is the amount of value appropriated by relevant stakeholders (e.g., the firm, employees, customers). A commonly used example is to think of value creation as a pie prepared by multiple people (stakeholders): the total value created is the size of the pie and value capture is how the pie is divided among the different stakeholders.. (Call & Ployhart, p. 574)	Employee value capture has been measured through earnings and benefits (Lieberman et al., 2017), such that "an employee appropriates more value when she receives higher compensation for a similar amount of work." (Ramirez & Tarzijan, 2018; p.1506) Government value capture operationalized as tax revenues (Lieberman et al., 2017) Supplier value capture operationalized through income statement expenses (Lieberman et al., 2017).
CONSEQUENCES			
Renegotiate Distribution	Stakeholders that perceive an unfair distribution of value, or capture lower amounts, may renegotiate their specific value capture outcomes.	"A stakeholder, then, who is not getting the portion of rent commensurate with his or her bargaining power, might instead renegotiate" (Coff, 1999, p.128)	Not empirically examined.
Exit Stakeholder Nexus	Stakeholders that perceive an unfair distribution of value, or capture lower amounts, may exit the stakeholder nexus.	"We know from the basics of markets that people will tend to make choices that provide them the most value for what value they give up. When they can find a better deal—i.e., more value for what they give up for it—people will tend to shift from their previous choice to this better deal over time." (Harrison & Wicks, 2013, p.99)	Not empirically examined.

Figure 1: Inclusive Model of Stakeholder Value Capture



SEPARATION OF VALUE CAPTURE DIMENSIONS

Within Coff's (1999) foundational paper, when speaking about the stability of a stakeholder nexus, he states that "if internal stakeholders became dissatisfied with the distribution of rent, they might quit and dissipate the rent-generating capabilities" (p.128), highlighting the conditions under which stakeholders may exit the nexus. These ideas are reiterated by Barney (2018) as he states, "if profit allocations among stakeholders are widely seen as unfair and inequitable, the stability of a particular bundle of co-specialized resources can deteriorate as stakeholders may withdraw, or threaten to withdraw, their resources" (p. 3316). Collectively, these two examples demonstrate a temporal separation between the market transaction, in which a stakeholder contributes their resources to the firm, and the time in which value is captured. These frameworks are embedded within economic theory and the assumption of pure bargaining, so it assumes that stakeholders would willingly enter into an agreement that accounts for their opportunity cost (Brandenburger & Stuart, 1996; Gans & Ryall, 2017) and is their best alternative, so it begs the question: *how could a stakeholder become so dissatisfied with their level of value capture that it would prompt an exit from the nexus post-transaction?*

Our answer to this question is that existing conceptions of value capture conflate two unique elements, specifically potential value capture and realized value capture. Specifically, we posit that at the time of the exchange, a stakeholder negotiates and secures (either informally or formally) from the nexus certain value capture outcomes to be experienced in the future, labelled potential value capture, and then works to transform and internalize this value post-transaction, labelled realized value capture. As it is too costly, or simply impossible, to achieve a complete contract among stakeholders (Barney, 2018), it creates an opportunity for a divergence between ex-ante value claims and ex-post value capture. Therefore, we can assume that stakeholders do not simply capture all the value they have negotiated for, but rather, it is this gap between potential and realized value capture that can prompt an exit from the nexus.

Value Capture Within the Market Transaction (Potential Value Capture)

The first component of value capture, PVC, reflects a stakeholder's ability to identify, negotiate, and formalize value capture claims with the stakeholder nexus. A stakeholder's PVC is determined by their negotiating environment (Asmussen, Foss, Foss, & Klein, 2020; Barney, 2018) and their possession of complementary resources, such as environmental scanning resources and current knowledge stocks.

Much of the VBS research focuses on the specific mechanisms that facilitate value capture within the market transaction (Coff, 1999). As previously mentioned, this research emphasizes the importance of competitive and pure bargaining power (Stoelhorst, 2021) in determining the distribution of value among stakeholders, in addition to firm-specific characteristics (Molloy & Barney, 2015) and institutional contexts (Ramírez & Tarziján, 2018)However, if we relax the

assumption of unrestricted bargaining and dive deeper into the value capture process, the distinction between PVC and RVC becomes apparent.

Although early theorizations assumed stakeholders are actively searching their environment and able to identify possible alternatives, called the assumption of unrestricted bargaining (Brandenburger & Stuart, 1996), this framework acknowledges that stakeholders differ in their ability to identify and analyze value-capturing opportunities within their environment. Specifically, stakeholders may (1) not be fully aware of what potential elements of value exist within their environment and (2) be unable to identify the relative impacts of the possible alternatives (Arenas, Murphy, & Jáuregui, 2020). This difference becomes apparent when comparing economic and non-economic forms of value, as non-economic forms resist standardized measurement. For example, Arenas et al. (2020) developed the construct of 'community influence capacity of firms', defined as "a community's ability to **identify**, act on and benefit from opportunities in their interactions with firms" (Pg. 740, emphasis added). Within the above-mentioned study, the authors illustrate how community stakeholders differ in their ability to interpret their current situations, with some stakeholders unaware of possible benefits, leading to differences in negotiation outcomes. This ability to interpret the situation is directly shaped by community characteristics such as their existing knowledge and experience stocks and degree of community cohesion and identity (Arenas et al., 2020). As stakeholder groups vary in their capacity to identify and assess alternatives, a way to overcome this challenge is through knowledge accumulation. Access to knowledge is vital for stakeholders as "some stakeholders may not even know that rent exists" (Coff, 1999, p. 122), or specifically, the incremental increase of rent that exists *because* of the contribution of their resources. Therefore, stakeholders that are able to reduce information asymmetries (Bridoux & Stoelhorst, 2014), balance inward and outward focuses of

attention (Gavetti, Greve, Levinthal, & Ocasio, 2012), and utilize their networks (Arenas et al., 2020) are better able to identify value-capturing elements within their environment.

Once an opportunity is identified, a stakeholder can leverage their bargaining power and negotiating environment to increase their PVC. Specifically, a stakeholder in possession of resources that are costly to replace to the firm (Coff, 1999) can easily be transferred to another firm (Barney, 2018) and have a high potential for value co-creation (Molloy & Barney, 2015) is able to negotiate for a higher proportion of the value created by the firm. This negotiation occurs within the *nexus* of stakeholders, so PVC is influenced by the relative bargaining power held by stakeholders (Bridoux & Stoelhorst, 2014), which can be increased through the formation of coalitions (Asmussen et al., 2020). The negotiating environment also fluctuates across contexts, as legal and normative institutions influence beliefs around the amount or types of value which *should* or *must* be distributed to specific stakeholders (Bowman & Ambrosini, 2000; Stoelhorst, 2021), leading to cases of overinvestment (Bosse et al., 2009; Garcia-Castro & Aguilera, 2015).

Lastly, once a stakeholder has negotiated PVC among the nexus, they may take steps to formalize their claims in consideration of the future value created by their resources. As a "nexus of contracts," stakeholders may engage in explicit and implicit contracts, understood from an incomplete contracting perspective (G. Baker, Gibbons, & Murphy, 2001; Hart & Moore, 1990). There are additional incentives for stakeholders that contribute valuable generating resources to contractually secure the use of their resources (Asher, Mahoney, & Mahoney, 2005) and subsequent value distribution. Contracting (although still incomplete) allows stakeholders to legally secure (a) the use of critical value-generating resources and (b) establish an ex-ante expectation of value distribution. Therefore:

Proposition 1: Stakeholders with complementary resources, such as environmental scanning and existing knowledge stocks, combined with a strong bargaining power position, will have higher value capture outcomes compared to stakeholders that only possess strong bargaining positions.

Ongoing Value Capture (Realized Value Capture)

PVC ends with the formalization of value claims and a stakeholder's contribution of resources to the firm. Now, stakeholders must work to actually realize these benefits! Therefore, the second stage of value capture, RVC, reflects a stakeholder's ability to transform and internalize the value they have contractually secured. It is at this point that stakeholders must leverage the value they've successfully negotiated for (PVC) with their existing resources to transform and realize these benefits. Therefore, a stakeholder's RVC is primarily influenced by their PVC and the presence of co-specialized complimentary resources.

First, stakeholders must work to transform their PVC into RVC, considering the amount and formalization of these value claims. From this, stakeholders that have bargained and negotiated additional benefits from the nexus will be able to realize more value than those with a lower PVC. This is due to the fact that stakeholders will be able to base their value capture expectations upon the explicit/implicit contracts they've previously made among the nexus (Bridoux & Stoelhorst, 2014). It is these explicit/implicit contracts which can be used to justify direct stakeholder efforts to transform the negotiated value into realized value. Specifically, if a stakeholder were to engage in efforts to capture RVC outside of their negotiated terms, this may cause concern to others within the nexus and corrective action to be taken (Asmussen et al., 2020).

However, it is important to recognize that the relationship between RVC and PVC is not a simple or linear relationship, as efforts to transform potential to realized value capture depend on a stakeholder's characteristics. Specifically, stakeholders must possess co-specialized resources to successfully transform RVC to PVC. Co-specialized resources, defined as resources that are "more productive when bundled together compared to when they are used separately" (Barney, 2018, p. 3314), have been central in explaining the value creation process. However, they are not only instrumental in explaining value creation but can also be helpful in explaining RVC outcomes. This is because value elements often require several preceding conditions to be internalized. For example, within the context of resource development, local communities and governments are often promised tax revenues, employment opportunities, and education funds, all with the purpose of increasing the services and quality of life for local residents. Communities attempting to capture economic value (in the form of tax revenues or revenue sharing) will require minimal preceding conditions (such as internal financial capabilities or infrastructure) to capture this value. Similarly, to capture non-economic elements, such as higher employment or education outcomes, local communities will need to possess a sufficient labour supply, members with adequate training and qualifications, and members motivated and interested in these positions; failure in any area of these conditions may limit a community's ability to capture these benefits. Therefore, if we extend the definition of co-specialized resources to incorporate resources that *create and capture more value* when bundled together compared to when they are used separately, we can better explain how PVC can be transformed and internalized to RVC outcomes.

Proposition 2: The possession of co-specialized resources mediates the relationship between potential and realized value capture, such that stakeholders that possess co-

specialized resources are more likely to translate their PVC to RVC outcomes, compared to stakeholders with unrelated or minimal co-specialized resources.

Value Capture Dynamics Across Time

Value capture processes cannot be limited to a one-time market transaction but rather reflect ongoing relationships between multiple partners. As such, stakeholders evaluate their value capture outcomes, considering any disparity between potential and realized value capture, among other fairness attributes (Bosse et al., 2009), and conclude with a decision to either remain or exit the nexus. Over time, these decisions to remain in the nexus create learning feedback loops in which stakeholders improve their ability to increase their RVC outcomes.

As time continues, the value that stakeholders are able to capture in one period influences their ability to increase their potential value capture in future interactions. This self-reinforcing loop is caused by several factors, including a learning process in which stakeholders become aware of value captured by other stakeholders and their own capabilities to internalize different elements of value and subsequently make justice assessments regarding the distribution of value at the nexus level. For example, an employee may purchase stock options as part of their total compensation; however, in the event that the value of these stocks significantly declines, the employee may be dissatisfied with their ability to internalize this value, especially if (a) these options were viewed as an extremely valuable component of their compensation, and (b) they perceive that other stakeholders are making value capture gains. Similarly, local communities often negotiate for community-based benefits, such as employment and tax revenue; however, empirical evidence illustrates that these benefits are rarely realized as expected (T. Gunton, Werker, & Markey, 2021). This gap between what an actor *anticipates* within their contractual agreement and what they

actually internalize post-agreement creates an opportunity for learning, as actors become aware of the complementary resources and environmental conditions needed to internalize specific benefits. In addition, stakeholders may also discover additional elements of value within their environment by observing the value captured by other stakeholders. For example, Arenas et al. (2020) show how the community of Yauli had successfully negotiated with a firm and was satisfied with its initial agreement for the receipt of six blankets and 500 T-shirts. They remained satisfied with this agreement until migrant workers informed them of the additional benefits secured by other communities, causing community dissent and legal action to be taken against their own leadership. This case is a perfect illustration of how stakeholders over time can expand their knowledge of the types and amount of value that exists in their environment. Therefore, the process and time between contractual capture and internalized benefits allow stakeholders to take into account their own internalization capabilities, as well as the benefits negotiated and captured by others, prompting a learning process.

First, when evaluating their decision to continue offering resources to the nexus, stakeholders will evaluate the gap between their potential and actual value capture, in addition to other elements of fairness, such as procedural and distributional justice. Returning to the earlier words of Coff and Barney, the widening gap between (1) a stakeholder's anticipated value capture and (2) a stakeholder's actual value capture is what creates stakeholder dissatisfaction, prompting stakeholder exit. This occurs as stakeholders make the ex-ante weighting between the resources they provide and the value they anticipate in capturing (PVC). In the event that a stakeholder's actual value capture (RVC) is below this threshold, a stakeholder may no longer deem this agreement to be above their opportunity cost or a fair distribution of value, and subsequently decide to withdraw from the nexus. In contrast, a stakeholder that is able to capture comparable levels of

PVC and RVC will remain in the nexus, as this distributional outcome is in alignment with their earlier decision to allocate resources.

The decision to continue providing resources to a stakeholder nexus is also influenced by the stakeholder's perception of fairness in value capture outcomes. These fairness judgements consider both the distributional and procedural elements of the value capture process, in which stakeholders evaluate (a) their value capture outcomes relative to other stakeholder groups and (b) the process in which value was negotiated and secured (Harrison et al., 2010). Therefore, regardless of whether a stakeholder has individually captured greater amounts of value, they will only continue to cooperate with the firm if they perceive the value distribution is fair (Adams, 1965; Harrison et al., 2010). This is because stakeholder behaviour can often be explained through norms of reciprocity and fairness in which stakeholders either withdraw or punish those they deem unfair (Bosse et al., 2009; Bridoux & Stoelhorst, 2014). Fairness assessments also influence situations in which stakeholders do not gain their expected levels of RVC, as "a stakeholder may not believe that its portion of the value distributed to it is precisely fair, it may still believe that processes are fair and that it has been treated with respect" (Harrison et al., 2010, p. 65). Empirically, we see this reflected in sustainable investing trends, in which shareholders withdraw their support from a firm, despite being able to capture value through rising stock prices and dividends, when they perceive the firm as being unfair in their treatment towards another stakeholder group (i.e., employee human right violations, environmental violations, etc.) (Plantinga & Scholtens, 2021). Consequently, stakeholder perceptions of the behaviour of other actors and the relative value they are able to capture will influence strategies and negotiations in future interactions. Therefore, this helps explain situations in which some stakeholders choose to

remain in sub-optimal value capture situations as long as there is procedural and distributional justice, such that:

Proposition 3a: Stakeholders will continue in the stakeholder nexus when their realized value capture is comparable to or greater than their potential value capture.

Proposition 3b: The relationship between PVC/RVC overlap and stakeholder continuation is mediated by a stakeholder's perception of fairness in the distribution of outcomes, such that an unfair assessment may prompt stakeholder exit, even in situations of equal PVC/RVC.

Proposition 4a: Stakeholders will exit the stakeholder nexus when their realized value capture is lower than their potential value capture.

Proposition 4b: The relationship between stakeholder evaluation of outcomes and continuation in the nexus is mediated by justice perceptions, such that a fair assessment may encourage stakeholder continuation, even in situations of lower RVC.

ILLUSTRATIVE EXAMPLES

Often, VBS theorizing is applied to a select group of prominent stakeholders, such as internal stakeholders (e.g., employees), supply chain stakeholders (e.g. suppliers or consumers), and shareholders (Barney, 2018; Lieberman et al., 2018). While there is also recognition that local communities, governments, and other societal actors may also be stakeholders (Tantalo & Priem, 2016), they have often been removed from our research "to simplify the discussion" (Barney, 2018, p. 3308). However, as local communities, governments, and actors are also common recipients of non-economic value, we illustrate two examples of the model drawing upon the experiences of employees and local community stakeholders.

Employee Potential and Realized Value Capture

As part of employment negotiations, recruiters often try to sell a company based on their compensation, commitment to career development, and social impact. In response, employees negotiate for economic and non-economic elements, such as employee's total compensation, including base pay, incentives, pension, and health benefits, and the nature of work to be done (Nzyoka & Orwa, 2016). In addition, employees also consider value elements such as having challenging and meaningful work, positive and supportive colleagues and supervisors, and advancement opportunities, as these elements often determine if an employee will accept an offer (Boswell, Roehling, LePine, & Moynihan, 2003). Employees may improve their overall bargaining power positions based on the labour market conditions and the type of human capital they provide (Molloy & Barney, 2015). In addition, employees who possess complementary resources, such as personal networks that assist in scanning their environment for opportunities, are also more likely to receive higher PVC (Simon & Warner, 1992). Therefore, individual employees work to identify and negotiate for different elements of economic and non-economic elements of value and then develop explicit (through an employment contract) or implicit (through verbal communication) claims to this value, ensuring that they deem this value comparable to the value of contributing their resources to the firm.

Economic elements such as base pay are quickly and easily transformed from a stakeholder claim to internalized value, although other non-economic elements such as career development or meaningful work may require more time. Specifically, as employees move from the 'honeymoon stage' of a new job, they gain a clearer understanding of the company, their role within it, and the complementary resources needed to transform PVC into RVC. For example, realizing meaningful

work requires that an employee is given autonomy and empowered to complete the aspects that are fulfilling (Chalofsky, 2003); however, autonomy is often only granted when "employees have more specific knowledge, when there are more exceptions in employee tasks, and when monitoring costs are lower" (van Triest & Williams, 2022, p. 1). Therefore, employees will require complementary resources, such as the recognition of technical capabilities or knowledge, in order to internalize the RVC of meaningful work. In the event that there is a widened gap between the PVC that an employee negotiated for and the RVC they successfully internalize, the employee may no longer deem this trade fair and may choose to exit the nexus. This aligns with our current theoretical understanding of voluntary employee turnover as a "lack of fit … can lead to judgments about the sufficiency or insufficiency of the individual's expected job satisfaction and likelihood for the duration of that expected job satisfaction" (T. W. Lee & Mitchell, 1994, p. 68). While the theory of voluntary employee turnover has significantly evolved over time (T. W. Lee, Hom, Eberly, Li, & Mitchell, 2017), the empirical connection between job satisfaction and turnover remains strong for employees with choice (J. Li, Lee, Mitchell, Hom, & Griffeth, 2016). Therefore, irrespective of their RVC in terms of compensation, employee stakeholders must also consider the gap between their expected PVC and RVC and reassess the fairness of this distribution.

Local Community Potential and Realized Value Capture

The in-depth case study conducted by Arenas et al. (2020) clearly illustrates the process by which local communities can transition through the various value capture stages. This case study is embedded within two rural communities in the Peruvian highlands, in which the large mining project of Toromocho was proposed. The Yauli and Pucará communities had an equal negotiating context, in which they "both faced the same mining project, had similar control over resources,

were subject to the same laws and regulations, had the same internal governance structures, and possessed a similar (albeit limited) ability to reject the project and/or make demands in negotiating processes" (Arenas et al., 2020, p. 741). However, one critical distinction between the two communities was the level of complimentary resources held, specifically around their ability to leverage their networks and scan their environment to gain additional insights on value capture opportunities. On the one hand, leveraging these resources enabled Pucará to improve their PVC by enhancing their ability to identify and negotiate for value elements, as this allowed them to gain "knowledge about strategies and tactics for securing benefits and defending community rights, such as trading land for land, or becoming a shareholder of the mining firm." (p. 747). As a result, Pucará was able to formalize their PVC claim, gaining $1.8 million, 1056 hectares of land, community infrastructure and employment, and social programming. In contrast, Yauli chose to limit their interaction within their network, resulting in a smaller environmental scan. As a result, "Yauli was relatively unaware of its leverage in early negotiations with PCI and the benefits that could be sought" (p.753), leading to a lower value identification and negotiation, and formalized their PVC claim as $425,000 in cash, $225,000 for social programmes, and relocation support.

While the economic elements, such as cash or land transfers, were quickly transformed and realized. Both Pucará and Yauli were satisfied with the evaluation of their initial value capture outcomes until Yauli became aware of Pucará's agreement and the unequal distribution of value among stakeholders. Specifically, as Yauli residents learned of the benefits afforded to Pucará, and common terms afforded to other communities in similar situations, they immediately withdrew their support from the firm and began taking legal action against the firm and the community's former leadership (p. 744). In addition to the economic elements, a divergence between potential and realized value capture emerged within the social elements of value, such as employment. Since

the date of the agreement, both communities struggled to gain consistent employment at the mine, as the mine was primarily staffed by employees from other regions and local employees lacked the required training or certification, and therefore were given lower quality, short-term positions (Margaret & Carol, 2016). As a result, Yauli has since removed their support from the project, initiating protests and limiting mine access to electricity (T. Li, Wang, Zhou, & Li, 2022).

Community stakeholders often become residual claimants to land-based projects and initiatives, offering their territory and consent in exchange for residual claims relating to taxes, employment, and other social outcomes. As shown above, communities often differ in their initial set of complementary resources and can therefore achieve different potential PVC outcomes (Arenas et al., 2020). Although communities may contractually secure this PVC through agreements, such as community or impact benefit agreements, the transition from PVC to RVC is often difficult (Adebayo & Werker, 2021; O'Faircheallaigh, 2021). For example, Adebayo and Werker (2021) conducted a study trying to quantify the benefits of two specific community agreements, and found that although the legally enforceable agreements reached with community stakeholders often contain a minimum employment target, the actual employment rates are significantly lower than these targets. Prior research has shown that communities are able to achieve better realization of their agreement terms when they possess complimentary resources, specifically their capacity for political mobilization and the support of broader indigenous political organizations (T. Gunton et al., 2021; O'Faircheallaigh, 2021). Accessing these broader networks illustrates a community's ability to leverage complementary resources such as broader environmental scanning and increasing knowledge stocks. However, while community stakeholders may have captured value in other areas, such as royalties and preferential contracting, the gaps between their PVC and RVC, and perceptions of fair distribution remain a source of

conflict, such that “youth demonstrated against Newmont, citing a failure to deliver local jobs and contracts and to protect the environment” (Adebayo & Werker, 2021, p. 6). Therefore, irrespective of the terms that communities may contractually secure, it is the perceptions of fairness, and the gap between their PVC and RVC that lead to instances of community conflict and stakeholder exit, or renegotiation.

DISCUSSION

Explanations of stakeholder value capture have long rested upon economic assumptions of bargaining power and zero-sum game theory, developing formulas based on "opportunity costs," "willingness-to-pay," and other quantifiable representations (Barney, 2020; Coff, 1999). But these concepts and processes represent a simplified version of reality, detached from the cognitive and behavioural limitations that ultimately influence value internalization. Therefore, we utilize a behavioural theory lens to explain how stakeholders can realize economic and non-economic value capture beyond the time and space of a single market transaction. To do so, we theoretically disentangle the concepts of *potential value capture*, the external processes by which stakeholders identify, negotiate, and formalize their value capture claims within the nexus, and *realized value capture*, an internal process by which stakeholders transform and internalize value elements. In doing so, this model extends our current understanding of value capture processes in several important ways.

First, this model separates the distinct elements of potential and realized value capture, changing our understanding of existing value capture theory and important antecedents. Prior literature has confounded these two terms, treating them as one, which has led to a simplified understanding of the value capture process. Specifically, value capture outcomes have been simply

predicted by a stakeholder's pure and competitive bargaining power (Stoelhorst, 2021). However, our model illustrates that bargaining power is a necessary yet insufficient condition in achieving realized value capture. Specifically, a strong bargaining power position may allow stakeholders to capture higher potential value capture outcomes through their stakeholder negotiations, although complimentary resources are required to transform that potential value into realized value capture. From a practical perspective, this means that stakeholders must strategically contractually secure value elements that align and complement their existing resource stocks, improving their chances of successfully securing this value. Failure to do so may result in situations where stakeholders that possess significant bargaining power lack the ability to realize value capture outcomes. Therefore, the role of co-specialized resources is central to our understanding of value capture outcomes, requiring further attention and research.

Second, our model emphasizes that value capture is a dynamic process that needs to be understood in longer temporal cycles. Much of the existing theorization and empirical studies have focused on the single point of the market transaction (Coff, 1999). This approach has been appropriate when assuming that value capture occurs at the time of exchange, and economic value is the primary focus of study. However, when we acknowledge that firms create economic and social forms of value, we must also adapt the timeframes in which potential value can be transformed to realized value capture, which often requires greater time periods (Cabral et al., 2019). This has significant empirical implications, as studies that measure value capture at the time of transaction or exchange may significantly underrepresent the true level of value capture as it is still yet to happen. We therefore compliment previous discussions on the need for long-term metrics to accurately measure value-creation (Wibbens & Siggelkow, 2020), and suggest that long-term measures are equally required for value capture. In addition, this model theoretically aligns

with the emerging research on temporal work and the role of time in strategy and organizations (Bansal, Reinecke, Suddaby, & Langley, 2022), and presents an opportunity to explore how community stakeholders interpret and perceive their past, present, and future value capture outcomes.

Lastly, our model offers a significant shift in our understanding of stakeholder decisions related to continuation in the nexus versus a possible exit. Economic theory has been influential in our understanding of stakeholder decisions, predicting that stakeholders would remain with the nexus as long as they were able to optimize their value capture outcomes relative to their alternatives (Coff, 1999; Molloy & Barney, 2015). However, the adoption of a behavioural theory lens illustrates that this is only part of the equation, as stakeholder decisions to stay/go are also determined by the stakeholder's evaluation of outcomes and perceptions of fairness. For example, scholars have traditionally assumed that shareholders are primarily motivated to maximize their investment return, either through dividends or capital gains (M. H. Miller & Modigliani, 1961), and existing VBS literature would suggest that shareholders would remain engaged with a firm as long as the firm was appropriately compensating them for their investment, taking into account their opportunity costs (Coff, 1999; Molloy & Barney, 2015). However, these models do not explain recent sustainable investment trends, such as exclusionary screening (GSIA, 2021), that may involve the exclusion of investments in entire sectors of the economy, such as the fossil fuel sector, in spite of their profit potential. Such investment strategies are not based on the maximization of economic value, as investors may exclude investments in entire sectors while potentially investing in other sectors with lower returns (Plantinga & Scholtens, 2021), due to considerations of fairness. Therefore, stakeholder nexuses remain stable not based on their

opportunity costs but rather on the individual perceptions of whether value distribution outcomes, and the process of distribution, are deemed fair.

While we feel our model offers a significant contribution to the literature, we must also acknowledge the limitations and boundary conditions of its application. First, the model is theorized at the level of stakeholder groups, rather than an individual stakeholder. While we found it beneficial to consider the collective resources, knowledge, and decisions of stakeholder groups, we also acknowledge that stakeholder groups are reflective of the individuals within them, and the micro-processes that guide and inform their behaviour (Harrison, Wicks, & Palmié, 2022), although these micro-processes remain outside of the scope of our model. Relatedly, our model aimed to explain the mechanisms and processes that underpin stakeholder value capture, with the concept of value destruction remaining outside the scope of this model for simplicity. Notably, stakeholders may simultaneously capture value and have value destroyed, across different dimensions, making the *evaluation of value capture outcomes* a highly complex process. Although it remains theoretically unclear if value capture and destruction are two ends of a spectrum, or completely different concepts, we did not theoretically explore or incorporate determinants of value destruction within the model.

Building off of the ideas presented in this paper, we see several avenues for future research. First, there is an opportunity to empirically test the model. While there is a need for more empirical VBS research in general (Ramírez & Tarziján, 2018), one possible stream of research may be to test our propositions, specifically the relationship between potential and realized value capture, and the role of complimentary resources. Second, further research on the effects of time and temporality on stakeholder perceptions and interpretations of value capture would be valuable. As little research exists on the individual perceptions and decision-making related to stakeholder value

capture, future research is needed to better understand how perceptions change and evolve across multiple levels and time periods. For example, an avenue of future research could explore how 'material temporality' (e.g., the temporality of material objects') (Hernes, Feddersen, & Schultz, 2021) influences stakeholder's understanding and perceptions of different value capture dimensions across time (Bansal et al., 2022). Lastly, the concept of value destruction remains underexplored within the literature, and although it is not explicitly included within our model, the model could offer a starting point for the theorization of value destruction. Our model suggests that stakeholders may remain in nexuses that may not maximize value capture, and possibly even destroy value, so further clarity around the construct and mechanisms of value destruction would be greatly valued.

CONCLUSION

Twenty-five years after Brandenburger and Stuart's (1996) seminal introduction of the notion of value capture, we extend this model to be inclusive of temporality and non-econonimc forms of value. Although there has been significant research and theoretical development aimed at expanding our understanding of value capture processes and outcomes, we argue that this development has been constrained by the implicit economic assumptions that are foundational to the theory. By identifying and relaxing some of these assumptions, and introducing an inclusive model of value capture, we hope that this article offers an innovative perspective on stakeholder value capture processes and encourages future research on the multiple and diverse dimensions of value capture and the mechanisms which influence this process across time.

REFERENCES

Adams, J. S. (1965). Inequity in social exchange. In Advances in experimental social psychology (Vol. 2, pp. 267-299): Elsevier.

Adebayo, E., & Werker, E. (2021). How much are benefit-sharing agreements worth to communities affected by mining? Resources Policy, 71, 101970.

Alcantara, C. (2007). To Treaty or Not to Treaty? Aboriginal Peoples and Comprehensive Land Claims Negotiations in Canada1. Publius: The Journal of Federalism, 38(2), 343-369.

Anand, A., Doll, J., & Ray, P. (2023). Drowning in silence: a scale development and validation of quiet quitting and quiet firing. International Journal of Organizational Analysis, ahead-of-print(ahead-of-print).

Aragon, F. M. (2015). Do better property rights improve local income?: Evidence from First Nations' treaties. Journal of Development Economics, 116, 43-56.

Aragon, F. M., & Kessler, A. S. (2020). Property rights on First Nations reserve land. Canadian Journal of Economics-Revue Canadienne D Economique, 53(2), 460-495.

Arenas, D., Murphy, M., & Jáuregui, K. (2020). Community Influence Capacity on Firms: Lessons from the Peruvian Highlands. Organization Studies, 0170840618814567.

Asher, C. C., Mahoney, J. M., & Mahoney, J. T. (2005). Towards a Property Rights Foundation for a Stakeholder Theory of the Firm. Journal of Management & Governance, 9(1), 5-32.

Asmussen, C. G., Foss, K., Foss, N. J., & Klein, P. G. (2020). Economizing And Strategizing: How Coalitions And Transaction Costs Shape Value Creation And Appropriation. Strategic Management Journal.

Baker, G., Gibbons, R., & Murphy, K. J. (2001). Bringing the Market inside the Firm? American Economic Review, 91(2), 212-218.

Bansal, P., Reinecke, J., Suddaby, R., & Langley, A. (2022). Temporal Work: The Strategic Organization of Time. Strategic Organization, 20(1), 6-19.

Barelli, M. (2012). Free, prior and informed consent in the aftermath of the UN Declaration on the Rights of Indigenous Peoples: developments and challenges ahead. The International Journal of Human Rights, 16(1), 1-24.

Barney, J. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. Strategic Management Journal, 39(13), 3305-3325.

Barney, J. (2020). Measuring Firm Performance in a Way that Is Consistent with Strategic Management Theory. Academy of Management Discoveries, 6(1), 5-7.

Been, V. (2010). Community Benefits Agreements: A New Local Government Tool or Another Variation on the Exactions Theme? The University of Chicago Law Review, 77(1), 5-35.

Bosse, D. A., Phillips, R. A., & Harrison, J. S. (2009). Stakeholders, reciprocity, and firm performance. Strategic Management Journal, 30(4), 447-456.

Boswell, W. R., Roehling, M. V., LePine, M. A., & Moynihan, L. M. (2003). Individual job-choice decisions and the impact of job attributes and recruitment practices: A longitudinal field study. Human Resource Management, 42(1), 23-37.

Bowman, C., & Ambrosini, V. (2000). Value Creation Versus Value Capture: Towards a Coherent Definition of Value in Strategy. British Journal of Management, 11(1), 1-15.

Brandenburger, A. M., & Stuart, H. (1996). Value-based business strategy. Journal of Economics & Management Strategy, 5(1), 5-24.

Bridoux, F., & Stoelhorst, J. W. (2014). Microfoundations for Stakeholder Theory: Managing Stakeholders with Heterogeneous Motives. Strategic Management Journal, 35(1), 107-125.

Cabral, S., Mahoney, J. T., McGahan, A. M., & Potoski, M. (2019). Value creation and value appropriation in public and nonprofit organizations. Strategic Management Journal, 40(4), 465-475.
Caine, K. J., & Krogman, N. (2010). Powerful or just plain power-full? A power analysis of impact and benefit agreements in Canada's north. Organization & Environment, 23(1), 76-98.
Call, M. L., & Ployhart, R., E. (2021). A Theory of Firm Value Capture from Employee Job Performance: A Multi-Disciplinary Perspective. Academy of Management Review.
Cascadden, M., Gunton, T., & Rutherford, M. (2021). Best practices for Impact Benefit Agreements. Resources Policy, 70, 101921.
CBC News. (2016). Deninu Kue First Nation takes fight for benefits to new Indigenous Affairs minister. 2023(Oct 17). Retrieved from https://www.cbc.ca/news/canada/north/deninu-kue-diamond-mine-ibas-1.3409567
Chalofsky, N. (2003). An emerging construct for meaningful work. Human Resource Development International, 6(1), 69-83.
Clements, K. W., Ahammad, H., & Qiang, Y. (1996). New mining and mineral-processing projects in Western Australia: Effects of employment and the macro-economy. Resources Policy, 22(4), 293-346.
Coff, R. W. (1999). When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power. Organization science, 10(2), 119-133.
Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128-152.
Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social Entrepreneurship: Why We Don't Need a New Theory and How We Move Forward From Here. Academy of Management Perspectives, 24(3), 37-57.
Darling, S., Harvey, B., & Hickey, G. M. (2023). From 'stakeholders' to rights holders: How approaches to impact assessment affect indigenous participation in the Yukon Territory, Canada. Environmental Impact Assessment Review, 99, 107025.
de Block, D., & Vis, B. (2019). Addressing the Challenges Related to Transforming Qualitative Into Quantitative Data in Qualitative Comparative Analysis. Journal of Mixed Methods Research, 13(4), 503-535.
De Crescenzo, V., Ribeiro-Soriano, D. E., & Covin, J. G. (2020). Exploring the viability of equity crowdfunding as a fundraising instrument: A configurational analysis of contingency factors that lead to crowdfunding success and failure. Journal of Business Research, 115, 348-356.
De Stefano, F., Bidwell, M., & Camuffo, A. (2022). Do managers capture the value they create? Drivers of managers' value capture in a large retail chain. Strategic Management Journal, 43(10), 1983-2011.
Dorobantu, S., & Odziemkowska, K. (2017). Valuing Stakeholder Governance: Property Rights, Community Mobilization, and Firm Value. Strategic Management Journal, 38(13), 2682-2703.
Doty, D. H., Glick, W. H., & Huber, G. P. (1993). Fit, Equifinality, and Organizational Effectiveness: A Test of Two Configurational Theories. Academy of Management Journal, 36(6), 1196-1250.
Dul, J. (2016). Necessary Condition Analysis (NCA):Logic and Methodology of "Necessary but Not Sufficient" Causality. Organizational Research Methods, 19(1), 10-52.

Dunham, L., Freeman, R., & Liedtka, J. (2006). Enhancing stakeholder practice: a particularized exploration of community. Business Ethics Quarterly, 16(1), 23-42.
Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. Academy of Management Review, 32(4), 1180-1198.
Fiss, P. C. (2011). Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. Academy of Management Journal, 54(2), 393-420.
FNIGC. (2014). Ownership, Control, Access and Possession (OCAP™): The path to First Nations information governance. Retrieved from http://fnigc.ca/sites/default/files/docs/ocap_path_to_fn_information_governance_en_final.pdf
Forster, M. E., Palmer, F., & Barnett, S. (2016). Karanga mai ra: Stories of Maori women as leaders. Leadership, 12(3), 324-345.
Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2020). A Stakeholder Theory Perspective on Business Models: Value Creation for Sustainability. Journal of Business Ethics, 166(1), 3-18.
Gans, J., & Ryall, M. D. (2017). Value capture theory: A strategic management review. Strategic Management Journal, 38(1), 17-41.
Garcia-Castro, R., & Aguilera, R. V. (2015). Incremental value creation and appropriation in a world with multiple stakeholders. Strategic Management Journal, 36(1), 137-147.
Gavetti, G., Greve, H. R., Levinthal, D. A., & Ocasio, W. (2012). The Behavioral Theory of the Firm: Assessment and Prospects. Academy of Management Annals, 6, 1-40.
Georgiou, A., & Arenas, D. (2023). Community in Organizational Research: A Review and an Institutional Logics Perspective. Organization Theory, 4(1), 26317877231153189.
Gilbert, J., & Lennox, C. (2020). Towards new development paradigms: the United Nations Declaration on the Rights of Indigenous Peoples as a tool to support self-determined development. In The United Nations Declaration on the Rights of Indigenous Peoples (pp. 103-123): Routledge.
Global Sustainable Investment Alliance. (2021). Global Sustainable Investment Review. Retrieved from http://www.gsi-alliance.org/wp-content/uploads/2021/08/GSIR-20201.pdf
Greckhamer, T. (2016). CEO compensation in relation to worker compensation across countries: The configurational impact of country-level institutions: CEO Compensation in Relation to Worker Compensation Across Countries. Strategic Management Journal, 37(4), 793-815.
Greckhamer, T., Furnari, S., Fiss, P. C., & Aguilera, R. V. (2018). Studying configurations with qualitative comparative analysis: Best practices in strategy and organization research. Strategic Organization, 16(4), 482-495.
Greckhamer, T., & Gur, F. A. (2021). Disentangling combinations and contingencies of generic strategies: A set-theoretic configurational approach. Long Range Planning, 54(2), 101951.
Gunton, C., Gunton, T., Batson, J., Markey, S., & Dale, D. (2021). Designing fiscal regimes for impact benefit agreements. Resources Policy, 72, 102004.
Gunton, T., Werker, E., & Markey, S. (2021). Community benefit agreements and natural resource development: Achieving better outcomes. Resources Policy, 73, 102155.
Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. Academy of Management Review, 9(2), 193-206.
Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. Strategic Management Journal, 31(1), 58-74.

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder Theory, Value, and Firm Performance. Business Ethics Quarterly, 23(1), 97-124.
Harrison, J. S., Wicks, A. C., & Palmié, M. (2022). Stakeholders Are Human: The Micro-foundations of Stakeholder Theory and an Application to the Value Distribution Problem. In M. Dion, R. E. Freeman, & S. D. Dmytriyev (Eds.), Humanizing Business: What Humanities Can Say to Business (pp. 529-558). Cham: Springer International Publishing.
Hart, O., & Moore, J. (1990). Property Rights and the Nature of the Firm. Journal of Political Economy, 98(6), 1119-1158.
Haslam McKenzie, F. M., & Hoath, A. (2014). The socio-economic impact of mine industry commuting labour force on source communities. Resources Policy, 42, 45-52.
Hernes, T., Feddersen, J., & Schultz, M. (2021). Material Temporality: How materiality 'does' time in food organizing. Organization Studies, 42(2), 351-371.
Herrmann, A. M., & Cronqvist, L. (2009). When dichotomisation becomes a problem for the analysis of middle-sized datasets. International Journal of Social Research Methodology, 12(1), 33-50.
Immergluck, D. (1998). Job Proximity and the Urban Employment Problem: Do Suitable Nearby Jobs Improve Neighbourhood Employment Rates? Urban Studies, 35(1), 7-23.
Jansen, J. J. P., Van den Bosch, F. A. J., & Volberda, H. W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedent's matter? Academy of Management Journal, 48(6), 999-1015.
Jones, G. R. (1984). Task Visibility, Free Riding, and Shirking: Explaining the Effect of Structure and Technology on Employee Behavior. Academy of Management Review, 9(4), 684-695.
Kovach, M. (2010). Indigenous methodologies: Characteristics, conversations, and contexts: University of Toronto Press.
Kraus, S., Ribeiro-Soriano, D., & Schüssler, M. (2018). Fuzzy-set qualitative comparative analysis (fsQCA) in entrepreneurship and innovation research – the rise of a method. International Entrepreneurship and Management Journal, 14(1), 15-33.
Kroeger, A., & Weber, C. (2014). Developing a Conceptual Framework for Comparing Social Value Creation. Academy of Management Review, 39(4), 513-540.
Kukutai, T., & Taylor, J. (2016). Data sovereignty for indigenous peoples: current practice and future needs. In Indigenous data sovereignty: Toward an agenda: ANU Press.
Kulchyski, P. (2013). Aboriginal rights are not human rights. defence of indigenous struggles. Winnipeg, Manitoba, Canada: ARP Books.
Lee, T. W., Hom, P. W., Eberly, M. B., Li, J., & Mitchell, T. R. (2017). On the Next Decade of Research in Voluntary Employee Turnover. Academy of Management Perspectives, 31(3), 201-221.
Lee, T. W., & Mitchell, T. R. (1994). An Alternative Approach: The Unfolding Model of Voluntary Employee Turnover. Academy of Management Review, 19(1), 51-89.
Li, J., Lee, T. W., Mitchell, T. R., Hom, P. W., & Griffeth, R. W. (2016). The effects of proximal withdrawal states on job attitudes, job searching, intent to leave, and employee turnover. Journal of Applied Psychology, 101(10), 1436-1456.
Li, T., Wang, C., Zhou, S., & Li, Y. (2022). Corporate Social Responsibility in China's Overseas Mining Projects. Journal of Human Resource and Sustainability Studies, 10(4), 846-852.
Lieberman, M. B., Balasubramanian, N., & Garcia-Castro, R. (2018). Toward a dynamic notion of value creation and appropriation in firms: The concept and measurement of economic gain. Strategic Management Journal, 39(6), 1546-1572.

Lieberman, M. B., Garcia-Castro, R., & Balasubramanian, N. (2017). Measuring value creation and appropriation in firms: The VCA model. Strategic Management Journal, 38(6), 1193-1211.
Lightfoot, S. R. (2010). Emerging international indigenous rights norms and 'over-compliance' in New Zealand and Canada. Political Science, 62(1), 84-104.
MacDonald, P. (2016). Mi'kmaq chiefs sign 'historic' deal with Kameron Coal over Donkin mine. Retrieved from https://www.cbc.ca/news/canada/nova-scotia/assembly-mi-kmaq-chiefs-donkin-royalty-coal-kameron-terry-paul-1.3622464
Margaret, M., & Carol, W. (2016). Chinese–Peruvian Relations in the Mining Sector: Learning Step by Step. In The Political Economy of China-Latin America Relations in the New Millennium (pp. 115-140): Routledge.
McGahan, A. M. (2023). The New Stakeholder Theory on Organizational Purpose. Strategy Science, 0(0), null.
McKenzie, F., Haslam McKenzie, F., & Hoath, A. (2014). Fly-In/Fly-Out, Flexibility and the Future: Does Becoming a Regional FIFO Source Community Present Opportunity or Burden? Geographical Research, 52(4), 430-441.
Meyer, A. D., Tsui, A. S., & Hinings, C. R. (1993). Configurational Approaches to Organizational Analysis. Academy of Management Journal, 36(6), 1175-1195.
Miller, D. (1996). Configurations Revisited. Strategic Management Journal, 17(7), 505-512.
Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. The Journal of Business, 34(4), 411-433.
Molloy, J. C., & Barney, J. (2015). Who Captures the Value Created with Human Capital? A Market-Based View. Academy of Management Perspectives, 29(3), 309-325.
Murphy, M., & Arenas, D. (2010). Through Indigenous Lenses: Cross-Sector Collaborations with Fringe Stakeholders. Journal of Business Ethics, 94, 103-121.
Murphy, M., Danis, W. M., Mack, J., & Sayers, J. (2020). From principles to action: Community-based entrepreneurship in the Toquaht Nation. Journal of Business Venturing, 35(6), 106051.
Northern Ontario Business Staff. (2019). Red Lake mine developer sharing the wealth with First Nations. Retrieved from https://www.northernontariobusiness.com/industry-news/mining/red-lake-mine-developer-sharing-the-wealth-with-first-nations-1612367
Nzyoka, C. M., & Orwa, B. H. (2016). The relationship between Total compensation and employee performance in the insurance industry, case of Mayfair insurance company limited. Psychology and Behavioral Sciences, 5(1), 20-36.
O'Faircheallaigh, C. (2013). Community development agreements in the mining industry: an emerging global phenomenon. Community Development, 44(2), 222-238.
O'Faircheallaigh, C. (2021). Explaining outcomes from negotiated agreements in Australia and Canada. Resources Policy, 70, 101922.
Odziemkowska, K., & Dorobantu, S. (2021). Contracting Beyond the Market. Organization science, 32:3, 776-803.
Pappas, I. O., & Woodside, A. G. (2021). Fuzzy-set Qualitative Comparative Analysis (fsQCA): Guidelines for research practice in Information Systems and marketing. International Journal of Information Management, 58, 102310.
Peteraf, M., & Barney, J. (2003). Unraveling the resource-based tangle. Managerial and Decision Economics, 24(4), 309-323.

Petersen, B., Pedersen, T., & Lyles, M. A. (2008). Closing knowledge gaps in foreign markets. Journal of International Business Studies, 39(7), 1097-1113.
Phillips, R., Freeman, R., & Wicks, A. C. (2003). What stakeholder theory is not. Business Ethics Quarterly, 13(4), 479-502.
Plantinga, A., & Scholtens, B. (2021). The financial impact of fossil fuel divestment. Climate Policy, 21(1), 107-119.
Pomart, P. N. (2020). Reframing Indigenous Peoples from Stakeholders to Rightsholders. Academy of Management Proceedings, 2020(1), 20874.
Powell, T. C., Lovallo, D., & Fox, C. R. (2011). Behavioral strategy. Strategic Management Journal, 32(13), 1369-1386.
Price, S. T., & Hartt, C. M. (2023). A story-net approach to qualitative research: having tea with stories! Qualitative Research in Organizations and Management: An International Journal, 18(3), 222-244.
Quinless, J. (2021). Decolonizing Data: Unsettling Conversations about Social Research Methods: University of Toronto Press.
Ragin, C. C. (2000). Fuzzy-set social science. Chicago: University of Chicago Press.
Ragin, C. C. (2008). Redesigning social inquiry : fuzzy sets and beyond. Chicago: University of Chicago Press.
Ragin, C. C. (2023). Research Note: Stepwise Consistency Analysis. Retrieved from https://compasss.org/wp-content/uploads/2023/08/Stepwise.pdf
Ramírez, C., & Tarziján, J. (2018). Stakeholder value appropriation: The case of labor in the worldwide mining industry. Strategic Management Journal, 39(5), 1496-1525.
Ryall, M. D. (2013). The new dynamics of competition. Harvard Business Review, 91(6), 80-87.
Salmon, E., Chavez, J. F., & Murphy, M. (2023). New Perspectives and Critical Insights from Indigenous Peoples' Research: A Systematic Review of Indigenous Management and Organization Literature. Academy of Management Annals.
Schilling-Vacaflor, A., Flemmer, R., & Hujber, A. (2018). Contesting the hydrocarbon frontiers: State depoliticizing practices and local responses in Peru. World Development, 108, 74-85.
Schnarch, B. (2004). Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities. International Journal of Indigenous Health, 1(1), 80-95.
Simon, C. J., & Warner, J. T. (1992). Matchmaker, Matchmaker: The Effect of Old Boy Networks on Job Match Quality, Earnings, and Tenure. Journal of Labor Economics, 10(3), 306-330.
Smith, L. T. (1999). Decolonizing methodologies: Research and indigenous peoples: Zed Books Ltd.
Statistics Canada. (2016). Dictionary, Census of Population, 2016. Ottawa: Ontario.
Stoelhorst, J. W. (2021). Value, rent, and profit: A stakeholder resource-based theory. Strategic Management Journal, 1-26.
Subedi, R., Roshanafshar, S., & Greenberg, T. L. (2020). Developing meaningful categories for distinguishing levels of remoteness in Canada. Retrieved from https://www150.statcan.gc.ca/n1/pub/11-633-x/11-633-x2020002-eng.htm
Szoke-Burke, S., & Werker, E. (2021). Benefit sharing, power, and the performance of multi-stakeholder institutions at Ghana's Ahafo mine. Resources Policy, 71, 101969.
Tantalo, C., & Priem, R. L. (2016). Value Creation through Stakeholder Synergy. Strategic Management Journal, 37(2), 314-329.

Tiryakian, E. A. (1968). Typologies. In D. Sills & R. Merton (Eds.), International encyclopedia of the social sciences (Vol. 16, pp. 177-186). New York: Macmillan.
van Triest, S., & Williams, C. (2022). Following the chain of command? How managers balance benefits and risks in granting autonomy to employees. European Management Journal.
Walter, M., & Andersen, C. (2016). Indigenous statistics: A quantitative research methodology: Routledge.
Wibbens, P. D., & Siggelkow, N. (2020). Introducing LIVA to measure long-term firm performance. Strategic Management Journal, 41(5), 867-890.
Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. Journal of Business Research, 66(4), 463-472.
Zaheer, S. (1995). Overcoming the liability of foreignness. Academy of Management Journal, 38(2), 341-363.

CHAPTER 2 (ARTICLE 2): BEYOND SMOKE AND MIRRORS: THE EFFECT OF STAKEHOLDER GOVERNANCE MECHANISMS ON COMMUNITY VALUE CAPTURE

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Abstract

An emerging transition within the strategic management literature stems from the recognition that broad stakeholder groups can become residual claimants and capture value from the firm. Despite this growing interest, the mechanisms through which non-equity stakeholders capture value and our measurement of stakeholder value capture remain rudimentary. This paper examines how a specific stakeholder governance mechanism, community benefit agreements (CBAs), can affect value capture outcomes for local stakeholders – specifically Indigenous communities. Using a difference-in-difference model of 427 communities across a 20-year time period, this study tests the direct impact of CBAs on economic and social dimensions of value capture. Our results illustrate that possessing a community agreement is often ineffective in capturing greater social or economic dimensions of value, while the possession of a modern treaty is significantly more impactful to community stakeholder value capture outcomes. Further, our study finds empirical evidence of value destruction, cases in which communities see declines in social or economic value stocks. This study contributes to both the stakeholder theory and strategic management literature by empirically testing prior theoretical developments and revealing the need for more nuanced attention to our understanding and determinants of economic and social value capture across time.

Keywords: value capture, community stakeholders, Indigenous Peoples, Value-Based Strategy (VBS)

INTRODUCTION

In 2010, Encanto Potash Corporation, a Canadian mining company, announced a potential agreement with Muskowekwan First Nation, on which the proposed mine would be located. Within the local community, this announcement evoked a range of positions, with elected leaders emphasizing the envisioned benefits of the agreement, including increased employment, revenue, and opportunity for younger generations (CBC News, 2010), and local community members contrasting this narrative with the potential costs of the agreement, including environmental degradation and possible negative economic and social impacts. These counter-narratives required the community to collectively consider the potential benefits and consequences of the proposed mine (The Canadian Press, 2011). Muskowekwan approved an agreement in 2014 with the belief that they would benefit from this partnership through the acquisition of company stocks, as well as increased employment and business opportunities (CBC News, 2014). Although the future remained uncertain for Muskowekwan First Nation, similar communities struggled to transform these contractual terms into community-based benefits (Adebayo & Werker, 2021; De Stefano, Bidwell, & Camuffo, 2022).

While these types of community agreements are not legally required, extractive companies dedicate significant resources to develop and implement contractual agreements with community stakeholders in an effort to secure a social license to operate (Dorobantu & Odziemkowska, 2017; Odziemkowska & Dorobantu, 2021). Commonly referred to as impact or community benefit agreements (CBAs), these contracts are legally binding and allow community stakeholders the opportunity to negotiate for specific benefits ex-ante (Cain, 2014). Recent studies suggest that CBAs allow firms to create and capture short-term value for a firm's shareholders (Dorobantu & Odziemkowska, 2017), although their ability to assist community stakeholders in capturing value

remains unclear. While we may assume that contractual agreements will promote stakeholder value capture, as they are able to legally secure specified terms, research also suggests that this relationship may not be linear as community stakeholders differ in their ability to identify and negotiate for community-based benefits (Arenas et al., 2020). This prompts the question: *how do CBAs contribute to community stakeholders' capture of social and economic value dimensions*? In other words, how do CBAs, as a form of contractual stakeholder governance, influence stakeholders' value capture outcomes?

Traditionally, strategic management scholars have focused on the relationship between firm strategies and performance, represented empirically through return on assets (ROA) or stock price metrics. However, there are significant limitations to this approach as it only reflects economic shareholder value capture; therefore, firm performance must also reflect the value captured by the full range of stakeholders along economic and non-economic dimensions (Barney, 2018; Coff, 1999). The value-based strategy (VBS) literature focuses primarily on explaining positive dimensions of economic value, overlooking elements of social value (Cabral et al., 2019; Harrison & Wicks, 2013) from the narrow perspective of the firm and a limited set of stakeholders. In addition, scholars have struggled to develop consistent operationalizations or metrics to express the value captured by a firm's stakeholders (Barney, 2020; Lieberman et al., 2018). The integration of economic and social elements of value into VBS theorizing is vital as prior research has shown that social value capture may be dynamic and synergistic, which is characteristically different from economic value capture (Cabral et al., 2019). Furthermore, many stakeholders may be motivated by and desire non-economic elements of value beyond profit maximization; therefore, it is important that our theorizing reflects these different motivations and experiences across stakeholder groups (Priem, 2007; Tantalo & Priem, 2016).

In this study, we provide the first empirical evidence on the extent of community stakeholder value capture, using a quantitative difference in difference modelling of Indigenous communities with extractive projects. Specifically, this study empirically tests how a contractual stakeholder governance mechanism (CBAs) influences a community stakeholder's capture of social and economic value. Although existing VBS theory holds that stakeholders contractually secure benefits through their bargaining power positioning (Barney, 2018; Brandenburger & Stuart, 1996), I provide empirical evidence to the limitations of this theory, as community value outcomes are not uniformly realized and, in some cases, value is even destroyed.

In doing so, I contribute to the VBS literature in four distinct ways. First, I challenge and test an existing theory of value capture, illustrating how value capture may not be fully realized post-negotiation, demonstrating a temporal gap between value that is contractually secured and value that is actually captured. Second, by developing an operationalization of community stakeholder value capture that includes economic and social elements of value (Cabral et al., 2019), this study illustrates the importance of incorporating social value into the theorization and empirical analysis of value capture. Third, this study presents an empirical analysis of value capture by reflecting elements of value capture and *destruction* (Barney, 2020), illustrating the complexity of stakeholder value capture, given that value creation and destruction may occur simultaneously across multiple areas. Lastly, this study strengthens the operationalization of stakeholder value capture by developing and testing an operationalization of community stakeholder value capture, thereby laying the groundwork for further empirical research.

In the following section, I present a review of the existing literature on stakeholder value capture and build a theoretical framework to support the analysis of community value capture outcomes. The theoretical development primarily draws upon arguments within the resource-based

view (RBV) of the firm and stakeholder theory to understand conditions that lead to community stakeholder value capture. Next, I use a difference-in-difference method using census data from 265 Indigenous communities in Canada to explore the causal effects of contractual community stakeholder governance mechanisms. By using the novel approach of a difference-in-difference method, I am able to isolate the specific effect of the CBA and test its relationship to specific elements of community value capture. Finally, I analyze these results in comparison to the existing literature and discuss important implications for future research and practice.

LITERATURE REVIEW

Stakeholder Value Capture

The primary objective of the strategic management field has been the analysis and prediction of competitive advantage among firms (Rumelt, Schendel, & Teece, 1991); in other words, why some firms outperform others and how this increased performance can be maintained. Foundational research aspired to answer this question and offered competing explanations of sustained firm performance based on a firm's resources (Barney, 2001; Peteraf, 1993), capabilities (Amit & Schoemaker, 1993; Nelson & Winter, 1982), and/or knowledge and innovation (Cohen & Levinthal, 1990; Nickerson & Zenger, 2004). Within these explanations, the concept of *firm performance* implicitly conflated notions of performance with rent generation[1] (Coff, 1999). For example, Winter (1995, p. 168) states that "'competitive advantage' is typically defined **as superior financial performance** [emphasis added]… The idea of superior financial performance

[1] Note: Terminology clarification. Rent & value are used interchangeably. Therefore, firm performance = value capture, while rent generation = value creation.

may be evoked by a range of phrases such as ‘above normal returns’, ‘high quasi-rents’, ‘value-creation’, and other near-synonyms for ‘making money’.”

From this example, we see how value creation is treated synonymously with superior financial performance, assuming that firms which are able to generate rents are subsequently able to capture those rents. However, some scholars have argued that “the assumption of a tight link between rent generation and firm performance is inaccurate and misleading” (Coff, 1999), thereby identifying the need to theoretically and empirically disentangle *value creation* (rent generation) from *value capture*, as it may be possible to contribute to rent generation without successfully capturing this added value (Bowman & Ambrosini, 2000; Call & Ployhart, 2021). It is this distinction that has prompted a new perspective on firm performance by theoretically integrating elements of the resource-based view of the firm (RBV) with stakeholder theory (Barney, 2018; Coff, 1999). Specifically, multiple stakeholders (inclusive of, but beyond, shareholders) are recognized for contributing value-generating resources to the firm and are thereby residual claimants to any added value that is created from the use of their resources (Barney, 2018; Coff, 1999; Peteraf & Barney, 2003). From this perspective, a more nuanced representation of firm performance emerges by articulating (1) the value captured by the firm, (2) the value captured by each individual stakeholder, and (3) the collective value captured by all relevant stakeholders at the nexus level (Barney, 2020)

The primary mechanism used to explain the division of value among stakeholders is through economic arguments of bargaining power (Brandenburger & Stuart, 1996) and negotiation skills (Barney, 2018). In alignment with common strategic management models and theories, such as Barney’s (1991) VRIN (valuable, rare, inimitable, non-substitutable) model of valuable resources and transaction cost economics (Williamson, 1981), a stakeholder’s bargaining power is

derived from the resources they possess, as well as the broader environment. Specifically, stakeholders are said to increase their bargaining power when they own and control resources that are perceived to be important to other stakeholders (*valuable)*, are costly to replace (*non-substitutable*), can be transferred to another firm at low cost (*low asset specificity),* and are less dependent upon other resources for generating rents (Barney, 2018; Coff, 1999). These factors are seen as objectively determined and based on economic principles.

While bargaining power is most influenced by resources that are objectively assessed in terms of their competitive market value, stakeholders also possess skills/resources that help them persuade others as to the value of these resources. As such, we can distinguish between value resulting from *competitive bargaining*, determined by market competition or competitive resources, and value resulting from *pure bargaining*, determined by negotiation skills or persuasive resources (Gans & Ryall, 2017; Stoelhorst, 2021). One way that stakeholders may enhance their persuasiveness is by developing a coalition to present a unified front (Brandenburger & Stuart, 1996; Coff, 1999); however, actors must also consider the required costs in creating and maintaining a coalition (Asmussen et al., 2020). The effects of persuasion and bargaining are significant, as shown by examples of overinvestment (Garcia-Castro & Aguilera, 2015; Harrison et al., 2010). Within these examples, "stakeholders receive more utility than they would get from their next best alternative" (Harrison et al., 2010, p. 65) as managers voluntarily allocate additional resources in an effort to increase stakeholder cooperation and access to resources (Garcia-Castro & Aguilera, 2015).

Community Benefit Agreements as a Form of Contractual Stakeholder Governance

Within this study, community benefit agreements (CBAs) are defined as "formal agreements between developers (private or public) and community representatives or organizations. They are designed to minimize negative project impacts and ensure that local communities obtain benefits from local development projects they would not enjoy in the absence of agreements, thus helping to reduce or eliminate conflict surrounding development" (O'Faircheallaigh, 2015b p. 96). Contrary to their firm counterparts, CBAs are not viewed as burdens on or financial investments from local communities (Cain, 2014). Instead, they are a legal instrument that enables communities to negotiate tangible benefits that may offset the perceived costs they will endure, both in the short and long term, as a result of the project (O'Faircheallaigh, 2015b; Parks & Warren, 2009). These tangible benefits may include economic aspects, such as hiring agreements, contract opportunities, and affordable housing (Adebayo & Werker, 2021; Parks & Warren, 2009), in addition to social aspects, such as the funding of local health and educational programs and cultural provisions (Cain, 2014; O'Faircheallaigh, 2015a). In addition, these agreements are negotiated to consider future generations and the benefits they ought to receive, as they will no longer be able to access finite natural resources and will incur future costs related to environmental remediation and restoration (O'Faircheallaigh, 2015b). Lastly, these agreements are legally enforceable, meaning that firms are obligated to continue abiding by the terms of the agreement, even in situations of changing corporate ownership or fluctuating financial conditions, allowing the community to continue receiving the agreed-upon benefits (O'Faircheallaigh, 2015b). In summary, it is reasonable to theorize that CBAs would ensure that "local communities obtain benefits from development they would not enjoy in the absence of agreements" (O'Faircheallaigh, 2015b, p. 96). Although CBAs offer an avenue for local communities to contractually negotiate benefits ex-ante, several

limitations may inhibit them from appropriating the expected value. The first obstacle is the relative bargaining power between the community and the extractive firm, which influences the distribution of value between these two partners.

The fact that the community has signed a CBA indicates a certain level of power the community possesses; however, this power can fluctuate according to variances within and external to the community (Arenas et al., 2020; Cain, 2014; O'Faircheallaigh, 2015b). First, firms are shown to intentionally select which communities they contractually engage with, preferring to sign contracts with communities that pose the largest risk to the project (Odziemkowska & Dorobantu, 2021). Specifically, communities that possess full property rights and have prior extra-institutional experience (e.g., blockades, protests) are statistically more likely to be offered a CBA (Odziemkowska & Dorobantu, 2021), as they have developed the internal mechanisms to challenge the firm either through legal or regulatory processes, or public opinion. Second, communities possess disparate levels of cohesion and collective identity, which influences their ability to negotiate as a cohesive unit with public support for particular negotiated benefit terms (Arenas et al., 2020; O'Faircheallaigh, 2015b). Empirically, Arenas et al. (2020) illustrate how communities with higher *community vigour,* defined as the "combination of the degree of cohesion within a community, the functioning of internal governance and the strength of its identity" (p. 752), are able to extract additional value from the negotiation process as they are able to better interpret the situation and the long-term impacts of their agreement. Communities may also increase their bargaining power through the level of knowledge and experience they possess or can access (Arenas et al., 2020; O'Faircheallaigh, 2015b). Within the Canadian context, accessing external knowledge may be increasingly challenging for Indigenous communities, as the contents

of CBAs are often confidential, meaning that communities must rely primarily on their individual experiences due to the lack of public information.

Although CBAs are typically developed with a single firm, they may include several different Indigenous communities, all of whom negotiate as a collective unit. By negotiating a CBA as a coalition, Indigenous communities are theorized to appropriate greater value due to the increase in their relative bargaining power to the firm (Asmussen et al., 2020). From this perspective, a single Indigenous community may be at a disadvantage in demanding higher benefits from the firm. Communities that are able to collectively negotiate agreements are able to appropriate greater value, as they are able to successfully leverage the knowledge and experience of others and enhance their ability to interpret the situation and possible outcomes (Arenas et al., 2020; Uchtmann, 1977).

AN INDIGENOUS-ALIGNED DIFFERENCE-IN-DIFFERENCES METHOD

Indigenous methodologies are necessary for Indigenous research as they honour and privilege the voices, places, and worldviews of Indigenous Peoples (Kovach, 2010; Smith, 1999). The emerging literature on Indigenous methodologies has explored the use of quantitative methods within an Indigenous methodological framework (Quinless, 2021; Walter, 2010; Walter & Andersen, 2016; Walter & Suina, 2019). This body of work emphasizes how the collection and analysis of data should align with and reflect Indigenous worldviews (Quinless, 2021; Walter & Andersen, 2016), benefit the communities which contribute to this knowledge (Drawson, Toombs, & Mushquash, 2017), and braid Western and Indigenous elements *throughout* the research design life cycle (Quinless, 2021). As such, Indigenous methodologies require that researchers draw attention to their implicit ontological and epistemological assumptions and commit to integrating these

principles beyond individual research phases. Therefore, this research is primarily grounded within an Indigenous methodology framework and adopts a difference-in-differences method throughout the research process to develop and execute an Indigenous difference-in-difference method.

Within the research design phase, the application of an Indigenous methodology is apparent in several important ways, namely the conceptualization and measurement of central concepts. Community value capture is the central concept within this study; therefore, when conceptualizing value capture from an Indigenous community perspective, I purposefully adopt an Indigenous framework that is "anchored in Indigenous traditional knowledge systems, community values, and the self-determined strength of individuals" (Quinless, 2021, p. 99). Adoption of this framework also influences how value capture is operationalized and the secondary data sources used to gather this measurement. For example, community wellness has previously been measured in non-Indigenous research using a single indicator of income inequality (Pendakur & Pendakur, 2021), while Indigenous-based research has advocated for a more holistic approach to wellness, operationalized by 19 socio-economic indicators (Quinless, 2021). In addition, it has been shown that the use of 5D data (Walter 2016, 2018), or mainstream data that is focused almost "exclusively on items related to Indigenous difference, disparity, disadvantage, dysfunction and deprivation" (Walter & Suina, 2019, p. 235), reflects a different underlying belief and value system and often leads to conclusions and statements of Indigenous deficit (Walter & Suina, 2019). To address this concern, I utilize data sources and variables that have been shown to reflect a holistic and culturally relevant representation of the concept of community wellness (Quinless, 2021), although limitations to available data remain an issue.

Within the data collection phase, the use of Indigenous methodologies influences the way in which Indigenous data are collected, namely the criteria for inclusion in the sample. It is

important to note that the Tri-Council's ethical requirements for Indigenous research *do not* extend to the use of secondary data. However, Quinless (2021, p. 78) emphasizes that "doing work with Indigenous Peoples and community in research has less to do with university ethics–approved "engagement" … and much more to do with genuine partnerships with agreed-upon ways of how knowledge is generated and shared". Therefore, by acknowledging Indigenous People's rights to ownership, control, access, and possession (OCAP©) of their information (FNIGC, 2014; Schnarch, 2004), secondary data cannot ethically be used without the consent of the nation. To honour these principles within the study, each Indigenous community was informed of the study and given an opportunity to participate or withdraw. These principles are then ended into the knowledge dissemination phases, as a report outlining the findings of this research will be shared directly with each community whose secondary data was originally collected, regardless of whether they permitted their data to be used or not. This practice reflects Indigenous communities' rights to be informed about research and developments that affect them, and benefit from these efforts (Gilbert & Lennox, 2020; Kukutai & Taylor, 2016).

Within the data analysis phase, Indigenous methodologies were interwoven with the difference-in-differences (DiD) method. The DiD method is a popular economic quasi-experimental design that aims to measure the effect of a policy/event by removing the effects of time and place (Berck & Villas-Boas, 2016; Pendakur & Pendakur, 2021). It was developed and first used by Snow (1856) to test if Cholera was spread by water or air in London and has since become a valuable research design within applied economics (Berck & Villas-Boas, 2016) and strategic management (Asgari, Singh, & Mitchell, 2017; Lim, Kim, & Agarwal, forthcoming). DiD models help to identify the distinct differences across time and groups, specifically: (1) before and after differences of the treatment group – *is there a difference in outcomes for communities*

pre/post-CBA, and (2) differences between the treatment group outcome and control group counterfactual – *is there a difference in outcomes for communities with and without CBAs.* To be applicable, this method holds two foundational assumptions that must be met – the parallel trends assumption and the common shocks assumption. First, the parallel trends assumption asserts that "before the policy change, the outcome trend between the two groups should be parallel, or alternatively, should differ by the same amount in every period" (Perraillon, Lindrooth, & Welton, 2019, p. 329; Wing, Simon, & Bello-Gomez, 2018). In other words, it's important that the treatment and control groups were evolving/changing in similar patterns *prior* to the treatment. Second, the common shocks assumption states that "events occurring during or after the policy change affected the treatment and comparison group in the same way" (Dimick & Ryan, 2014; Perraillon et al., 2019, p. 330). Simply speaking, the treatment and control groups are assumed to be equally impacted by any external factors/events that may influence the dependent variable.

Data Sources

Our unique dataset has been collected and compiled from several sources. First, we identified the population of signed community-firm agreements within Canada, identifying 535 agreements ranging from 1974 to 2021. This dataset includes agreements between mining companies and Indigenous communities in Canada, as reported by Natural Resources Canada (NRCAN), the federal department responsible for resource development. Although there are various forms of community-firm contracts, for the purpose of this study, we exclusively included Impact Benefit Agreements (IBAs), Participation Agreements (PAs), or Socio-Economic Agreements (SEAs), as these are comparable forms of CBAs. Once the population of agreements was determined, we identified specific communities that were signatories to each agreement as the treatment group. As

a control group, Indigenous communities that were within a 500 km radius of the specific projects were identified, as previously done in prior studies (Odziemkowska & Dorobantu, 2021). As consistent community-level data was difficult to gather for Metis and Inuit communities, this study exclusively studied the impacts on First Nations communities.

For each community, socio-economic indicators were collected from Statistics Canada, specifically data from the *National Household Survey* and *Crime Severity Index,* which have been conducted since 1991 and 1998, respectively. The *National Household Survey* is deployed every 5-years and includes a variety of social and economic indicators that have been used in prior Indigenous community-based research (Pendakur & Pendakur, 2021; Quinless, 2021). Within the study, we collected data on income, employment, housing, education, mobility, and other important topics.

Empirical Design

Matching Approach. We construct our matched sample by first identifying the full list of signed CBAs within Canada, and the Indigenous communities that are signatory to these agreements, forming the treatment group. We then take each community-mine observation and attempt to match it with a non-signatory First Nation community surrounding the same mining project. This allows us to account for firm or project-specific variables, such as a firm's stakeholder orientation or phase of project development while also creating an appropriate counterfactual, or control group. We used coarsened exact matching (CEM) to identify communities within our control group (Iacus, King, & Porro, 2012) from the full sample of Indigenous communities and match without replacement, as used in prior studies (Dorobantu & Odziemkowska, 2017). Our CEM matched communities based on their location to the mine (maximum of 500 km), and whether they were

signatory to a modern treaty, in alignment with prior research (Aragon, 2015). From these matching criteria, CEM identified 69 unique groups, including 92 communities (22.9% of the sample) that have signed agreements (treatment group) and 310 communities (77.1% of the sample) without agreements (control group). Having an unbalanced panel, with a higher proportion of never-treated communities is beneficial, as "the larger the percentage of never-treated units, the less problematic the biases associated with TWFE staggered DiD regression" (A. C. Baker, Larcker, & Wang, 2022, p. 394).

Dependent Variables – Community Value Capture: Community Value Capture represents changes across a variety of socio-economic conditions a community may face. In prior literature, community value capture has not previously been empirically measured, although government value capture has been coarsely operationalized through tax payments (Lieberman et al., 2017). This operationalization is not applicable in this study, as (1) firms are not required to provide tax payments to Indigenous governments, and (2) we are interested in understanding economic and non-economic forms of value capture. Therefore, we draw upon Indigenous research, primarily the indicators developed and verified through the First Nations Perspective on Health & Wellness (FNPOW) model (Quinless, 2021), to empirically measure value capture outcomes. This model adopts a holistic and culture-informed conception of community wellness (physical, emotional, social, and cultural), operationalized through economic and social indicators related to employment, language, education, income, mobility, health, and housing outcomes (Quinless, 2021). This model illustrates the close connections between individual and community well-being, specifically along dimensions of physical, emotional, spiritual, and mental well-being (Quinless, 2021). Following this research, we operationalize community value capture along 14 socio-economic dimensions that reflect individual and community indicators of well-being. We

recognize that cultural, health, and environmental dimensions of well-being are relevant and central to our understanding of Indigenous well-being; however, they are not included in this study due to the lack of available data.

Using the National Household Survey, 12 variables were collected at a community level to reflect employment, education, income, mobility, and housing outcomes. This data was then supplemented using two variables from the Canada Crime Index (see summary statistics for all variables in Table 2), as community safety is a known outcome of development projects (Gibson & Klinck, 2005; Sweet, 2013).

Independent Variable(s)*:* The key independent variable used within this study is the treatment effect, specifically whether the community is a signatory to a CBA for the project. Therefore, the treatment effect distinguishes between communities without a CBA (coded as 0) and communities with a CBA (coded as 1).

Control variables*:* Although a matched-pair sample can control for external variance (Mckinlay, 1977), several community-level controls are included within the model as they may differ between the treatment and control groups. First, the *presence of a modern treaty* has been shown to significantly influence community dynamics, such as a rise in income and housing prices, although it's insufficient in impacting employment and economic development outcomes (Aragon, 2015). The presence of a modern treaty is impactful as it provides robust property rights to local communities, allowing communities to reduce transaction costs when collaborating with outside firms (Aragon, 2015; Aragon & Kessler, 2020) while also providing the community with political strengths when considering external projects. Secondly, we control for the community's *property use rights* or the specific property rights the community has over the mine location. During the initial phases of colonization, Indigenous communities faced a diverse range of experiences with

the incoming colonial British government. Communities were often relocated to smaller reserves, with some communities being offered "historic treaties," which required the ceding of large tracks of land in exchange for use rights for subsistence hunting and gathering (Barker, Rollo, & Lowman, 2016; Sosa & Keenan, 2001). The boundaries of Indigenous lands were ascribed in accordance with historic Indigenous villages and nomadic routes or colonial settlement plans; therefore, the presence of valuable minerals or deposits on these lands was purely chance. From these diverse colonial experiences, a range of property rights regimes emerged for Indigenous communities, with some communities possessing basic use rights, to more robust formal rights established through modern treaties for these lands. Lastly, an interaction between these variables reflects the *duration and intensity of legal governance* over the territory. Specifically, it acknowledges that strong governance systems and property rights may interact with one another.

Instrumental Variables. Endogeneity is a growing concern within strategic management research (Certo, Busenbark, Woo, & Semadeni, 2016) and can lead to significant biases in coefficient estimates (Hamilton & Nickerson, 2003). When testing the effects of contractual stakeholder governance on value capture outcomes, we must account for the self-selection bias that exists. Specifically, for an agreement to occur, both the firm and the Indigenous community must self-select into the agreement, leading to the possibility that communities that are offered and agree to a contract may differ from those that do not. In response, instrumental variables that predict the independent variable, being a signatory to a CBA, but not the dependent variable, community's value capture outcomes following the CBA, can be a useful way of extracting the endogenous effects. Therefore, we use a variable *water match* to identify whether the community is co-located on the same watershed basin as the mine. This is an appropriate instrument for this study, as co-location on a watershed has been shown to positively influence community

stakeholder contracting (Odziemkowska & Dorobantu, 2021), but is unlinked to changes in socio-economic outcomes.

Analysis

To test the treatment effect of a CBA on community value capture, we use a stacked DiD design to circumvent concerns of bias and weighting within TWFE models (see Gormley and Matsa (2011), or Cengiz, Dube, Lindner, and Zipperer (2019)). A 'stacked' approach appropriately accounts for the complexities and biases that confound results when using staggered treatment timings and heterogeneous treatment effects, using OLS to efficiently determine the weighting of clean 2x2s (A. C. Baker et al., 2022). Therefore, to test the treatment effect of a CBA on community value, we first use linear probability (OLS) models for a clearer interpretation of the coefficients, as done within prior studies (see S. Lee & Puranam, 2017; Lim et al., forthcoming). Following this, we add to these models by including control variables, and interactions of these controls to offer an additional lens. Lastly, we use Angrist & Pischke's (2009) two-stage least squares regression (2SLS) equation, using nonlinear fitted values as an instrument for the binary treatment indicator to account for endogeneity. The first stage of this equation uses a probit regression to predict whether a community would have been treated. We then use these values as our instrument for the second equation – the treatment effects model – which is comparable to the Heckman selection model (Clougherty, Duso, & Muck, 2016).

Parallel Trends Assumption

The parallel trends assumption is central within difference-in-difference methods and suggests that "the average outcomes for the [treated group]… and for the "never-treated" group would have

followed parallel paths in the absence of treatment" (Callaway & Sant'Anna, 2021, p. 204). Initially, we would assume that our treatment and control groups are comparable and appropriate comparisons, as their matching was made based on comparable governance systems and property rights, distance to the project, and location. We would assume that communities within the same geographical area, facing the same social and economic environments would be comparable. Furthermore, as prior research has shown significant economic differences for communities with modern treaties (Aragon, 2015), we incorporate this within our matching. Although there are theoretical justifications for these two samples being comparable, we also provide empirical evidence of the absence of pre-trend differences between the control and treatment groups as an additional measure (Baker et al., 2022; Gormley & Matsa, 2011).

The results from our pre-trends analysis on various ex-ante community characteristics are provided in Table 2. Within this analysis, we test the significance of the pre-treatment indicators between the treatment and control group, while including strata fixed effects. As we can see from this table, we see few significant differences between our treatment and control groups prior to the treatment, other than the differences in distance. Specifically, we see that treated communities have slightly higher employment rates (4.68% higher), a higher percentage of trades certifications (2.39% higher), slightly less violent crime (.316 index points, or 0.1% lower), and 40.658 kms closer to the project. Deviations from the parallel trends assumption, while existent, are less worrisome as our matching strategy aimed to match communities that were comparable in their *likelihood* of being offered a CBA, and deviations are relatively modest.

Table 2: Pre-Treatment Description of Community Characteristics

Variable	N	Mean	Std. dev.	Min	Max	P-value of Difference
Employment Rate	3,013	43.037	11.569	4.500	94.000	0.035*
Participation Rate	3,015	55.772	12.086	12.700	94.100	0.090

Total Population	2,914	560.619	1,064.630	40.000	17,655.000	0.819
Individual Median Income	1,569	17,512.100	8,830.391	2,952.000	49,600.000	0.159
Median Family Income	2,522	29,464.250	24,986.450	0.000	132,000.000	0.052
Education - No degree	2,867	0.276	0.124	0.000	0.750	0.541
Education - Trades	2,867	0.075	0.058	0.000	0.444	0.033*
Education - University Certif.	2,867	0.022	0.035	0.000	0.250	0.612
Education - University Degree	2,293	0.032	0.044	0.000	0.4375	0.476
Crime Severity Index	2,579	165.485	149.458	0.000	1,855.270	0.453
Violent Crime Severity Index	2,579	209.780	243.547	0.000	1,707.480	0.050*
Occupied Dwellings	2,979	189.138	445.111	1.000	8,995.000	0.732
1 Year Mobility	2,866	0.872	0.082	0.231	1.125	0.892
5 Year Mobility	2,865	0.615	0.127	0.014	1.000	0.920
Indigenous population (% of Total Pop.)	2,853	0.892	0.198	0.015	1.250	0.439
Distance (kms)	3,992	177.713	126.724	1.450	558.100	0.000***

FINDINGS

In our matched sample analysis, each observation represents an Indigenous community proximate to a mining project that negotiated a CBA, with 'treated' observations being communities that were signatories to that agreement, and the remaining communities forming the 'control' observations. The results of the DiD analyses are provided in Table 3 and Table 4, including the fixed effects models and the 2SLS model.

Individual-Level Community Stakeholder Value Capture

Individual community stakeholder value capture can be seen in socio-economic indicators measured at an individual level, such as individual income or educational attainment rates. At an individual level, we analyze both economic dimensions, such as individual income, and social dimensions of value capture, such as educational attainment outcomes. Table 3 presents our results describing how various individual-level community stakeholder value capture indicators are impacted when a community is a signatory to a CBA. Within this table, each dependent variable

is analyzed using four models, exploring the effects of the treatment (model a), controls (model b), interacted controls (model c), and a 2SLS model (model d).

Individual Economic Value: First, we explore the impact of CBAs on the economic indicator of median individual income levels. In our basic analysis (model 2a), we see a positive treatment effect, such that communities with agreements observe an increase of $1499.10 higher than those without (p=0.043). When we add controls to our model (model 2b), this positive treatment effect continues, with a gain of $1526.90 for treatment communities (p=0.040) and a gain of $1330.70 for communities with modern treaties (p=0.020), and historical use rights being insignificant. Next, we include an interaction between the treatment and possessing a modern treaty (2b), and surprisingly find that the treatment and modern treaty effects on their own are significant, while communities that simultaneously possess both observe a substantial median individual income increase of $5256.20. Lastly, we run a 2SLS model to account for the endogeneity of the treatment variable. First, we use a probit model (Model 1) that predicts whether a community was offered a CBA, using the instrument, and fixed effects for the strata and year. We use an instrumental variable developed in prior research (Odziemkowska & Dorobantu, 2021) which reflects the co-location of Indigenous communities on the same watershed basin as the project, which was shown to positively predict a CBA, without holding any impact on socio-economic indicators. In our probit model, we find a significant positive relationship between the presence of a CBA for a community and our instrumental variable, *watermatch* (p=0.000). We then use these fitted values from the probit model as our instrument in a conventional 2SLS estimation. Within the second stage (model 2d), we find that the treatment effect is no longer significant, although communities with a modern treaty remain to observe $2087.3 higher median incomes,

Table 3: Difference-in-Difference Results – Individual Level

	(1)	(2a)	(2b)	(2c)	(2d)	(3a)	(3b)	(3c)	(3d)	(4a)	(4b)	(4c)	(4d)	(5a)	(5b)	(5c)	(5d)	(6a)	(6b)	(6c)	(6d)
		Median Individual Income				No Education (Population %)				Trades (Population %)				University Certificate (Population %)				University Degree (Population %)			
Treatment - CBA		1499.1*	1526.9*	1102.9	-605.1	-0.002	-0.002	-0.003	0.059	-0.002	-0.002	-0.004	-0.024	-0.010**	-0.010*	-0.010**	-0.028*	0.001	0.000	-0.000	-0.032+
		(0.043)	(0.040)	(0.159)	(0.679)	(0.855)	(0.896)	(0.819)	(0.125)	(0.708)	(0.742)	(0.548)	(0.439)	(0.009)	(0.012)	(0.008)	(0.036)	(0.907)	(0.963)	(0.979)	(0.052)
Controls																					
Modern Treaty	0.287		1330.7*	734.8	2087.3*		-0.022	-0.025	-0.022		-0.014**	-0.018***	-0.009+		-0.014***	-0.016**	-0.011**		0.017	0.016+	0.017
	(0.188)		(0.020)	(0.155)	(0.011)		(0.268)	(0.231)	(0.268)		(0.001)	(0.000)	(0.098)		(0.000)	(0.005)	(0.002)		(0.126)	(0.072)	(0.133)
Historical use rights	0.0263		-71.25		-80.64+		-0.001		0.000		0.001		0.001		-0.000		-0.001		0.001		0.000
	(0.869)		(0.468)		(0.092)		(0.133)		(0.909)		(0.446)		(0.415)		(0.199)		(0.396)		(0.614)		(0.845)
Interaction																					
Treaty x CBA				5256.2***				0.015				0.024+				0.010				0.004	
				(0.000)				(0.644)				(0.097)				(0.368)				(0.884)	
Watershed	1.195***																				
	(0.000)																				
Fixed Effects																					
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Project		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strata	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Community		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-3.969***	17316.0***	17193.8***	17194.0***		0.277***	0.279***	0.278***		0.075***	0.075***	0.076***		0.023***	0.024***	0.024***		0.031***	0.030***	0.030***	
	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	
N	19656	1526	1520	1526	1560	2829	2823	2829	2877	2829	2823	2829	2877	2829	2823	2829	2877	2829	2823	2829	2877
R^2	-1014.6	0.910	0.910	0.912	-0.005	0.698	0.698	0.698	-0.024	0.489	0.489	0.489	-0.007	0.362	0.363	0.363	-0.010	0.564	0.566	0.566	-0.039

p-values in parentheses

$^{+}p < 0.10$, $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

with historical use rights having a marginal negative effect (80.64, p=0.092). In summary, we find that higher individual-level economic value capture outcomes are not independently or consistently impacted by the presence of a CBA, but rather, consistently influenced by the possession of a modern treaty.

Individual Social Value: Next, we consider the social impact of CBAs on individual-level indicators of educational attainment, specifically the percentage of the population with their highest educational attainment being no education (model 3), a trades certificate (model 4), a university certificate (model 5), and a university degree (model 6). When analyzing the changes to the percentage of community members with no formal education, there are no significant effects across all four models (models 3a, 3b, 3c, 3d).

We then analyze the treatment effect on the percentage of people with a trade certificate. Our basic analysis (model 4a) provides no significant results; however, when we add controls to our model (model 4b) we find a significant negative effect for communities with a modern treaty, indicating that they see a decrease of 1.4% post-agreement (p=0.001). When considering the interaction effects (model 4c), we find an interesting effect, with the possession of a modern treaty still reducing the percentage of trade certifications by 1.8% (p=0.000), although the possession of a CBA and a modern treaty presents a marginally significant *increase* of 2.4% (p=0.097). Lastly, we consider the 2SLS model (model 4d), which shows a marginally significant effect for communities with a modern treaty.

Next, we test the treatment effect on the percentage of the population with a university certificate. The basic treatment model (model 5a) shows a negative treatment effect, with signatory communities seeing a 1.0% (p=0.009) decline in the percentage of members with a university certificate. Next, we include our controls (model 5b), and this treatment effect remains (p=0.012)

while the possession of a modern treaty offers another negative effect of -1.4% (p=0.000). When considering the interaction effects of our controls (model 5c), the effects remain unchanged. Lastly, when accounting for endogeneity (model 5d), the results remain significant, illustrating a persistent negative effect for communities that have a CBA (-2.8%, p=0.036) or a modern treaty (-1.1%, p=0.002).

Lastly, we consider how a CBA may impact university degree attainment, specifically, the percentage of the community with a university bachelor's degree or higher. Our basic model (model 6a) and added controls (model 6b) illustrate no significant treatment or control effects. When we consider an interaction effect (model 6c), we see a 1.6% increase for communities with a modern treaty (p=0.072). However, when we account for the endogeneity of the treatment (model 6d), we see a significant negative treatment effect of -3.2% (p=0.052) for communities with a CBA, while the modern treaty effect is no longer significant.

In summary, the impact of the CBA (treatment effect) is heterogeneous across individual-level economic and social outcomes. When considering individual-level economic indicators, such as individual median income, we see that the CBA doesn't consistently or independently increase individual income levels. Instead, communities that possess a modern treaty, or both a modern treaty and CBA, are able to increase their individual income post-agreement. In terms of individual-level social indicators of value capture, the possession of a CBA or modern treaty often has a neutral or negative effect, decreasing the percentages of members with trades or university certificates or degrees.

Community-Level Community Stakeholder Value Capture

In addition to the individual-level value capture, we also explore the effects of the CBA on community-level indicators of value capture. At a community level of analysis, we analyze

economic dimensions of value capture, using indicators reflecting labour market conditions and family income, and social dimensions of value capture, using indicators reflecting community migration and crime rates (see Table 4)

Community Economic Value: We explore the impact of CBAs on community-level economic value capture, in terms of the labour market, family income, and available housing. To explore the impacts of the CBA on a community's labour market, we use indicators related to a community's unemployment, employment, and participation rate. When analyzing the changes in the unemployment rates, the four models (models 7a, 7b, 7c, and 7d) consistently illustrate an absence of the treatment effect (coefficients are not significant) while possession of a modern treaty increases the unemployment rate by nearly 4.5% post-agreement. These results are duplicated when we explore the effects on a community's employment rate (models 8a, 8b, 8c, and 8d), where the presence of a CBA has no effect, while a modern treaty decreases the employment rate by nearly 5% post-agreement. When considering the participation rate, indicative of the relative size of a community's labour force, all four models (models 9a, 9b, 9c, 9d) consistently fail to find significant treatment or control effects. Therefore, we can conclude that communities that are signatory to a CBA experience no additional labour market gains in comparison to communities without a CBA, while possession of a modern treaty suppresses the number of people employed in the community.

Next, we consider the treatment effect on median family income outcomes. Although our first basic treatment model (model 10a) shows no significant effects, when adding controls (model 10b), we see that communities with historical use rights to the mine location experience a decrease of $626.30 ($p=0.030$) to their income compared to those without use rights. When we consider the interaction effects of a modern treaty with the CBA (model 10c), we see a significant increase in

Table 4 Difference-in-Difference Results - Community Level

	(7a)	(7b)	(7c)	(7d)	(8a)	(8b)	(8c)	(8d)	(9a)	(9b)	(9c)	(9d)	(10a)	(10b)	(10c)	(10d)	(11a)	(11b)	(11c)	(11d)
	Unemployment Rate				**Employment Rate**				**Participation Rate**				**Median Family Income**				**Occupied Dwellings**			
Treatment - CBA	-1.184	-1.269	-1.549	-2.649	0.625	0.714	0.596	-3.583	1.071	1.088	0.863	-3.175	-453.8	-359.0	-1951.6	-11,397.5*	-16.37	-16.39	-15.22	-38.67
	(0.373)	(0.341)	(0.276)	(0.570)	(0.593)	(0.545)	(0.633)	(0.240)	(0.391)	(0.383)	(0.514)	(0.500)	(0.798)	(0.840)	(0.295)	(0.015)	(0.139)	(0.136)	(0.189)	(0.146)
Controls																				
Modern Treaty		4.450**	3.829**	4.531**		-4.739***	-4.995***	-3.869***		-0.627	-1.126	0.110		-1310.5	-3721.1	10,179.9		51.70*	55.26*	55.31**
		(0.002)	(0.003)	(0.002)		(0.000)	(0.000)	(0.000)		(0.595)	(0.382)	(0.926)		(0.659)	(0.259)	(0.240)		(0.013)	(0.011)	(0.004)
Historical use rights		-0.0922		-0.114		0.0294		-0.043		0.153		0.082		-626.3*		-695.5		-1.254		-1.725
		(0.667)		(0.575)		(0.820)		(0.653)		(0.548)		(0.697)		(0.030)		(0.218)		(0.323)		(0.356)
Interaction Treaty x CBA			3.991*				1.570				3.134				21,559.1***				-27.23	
			(0.024)				(0.419)				(0.326)				(0.000)				(0.391)	
Fixed Effects																				
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Project	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strata	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Community	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	25.79***	25.57***	25.52***		42.98***	43.22***	43.28***		55.69***	55.61***	55.74***		41005.0***	41337.1***	41174.6***		195.5***	191.4***	191.7***	
	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	
N	2594	2588	2594	2638	2961	2955	2961	3009	2963	2957	2963	3011	1672	1666	1672	1708	2983	2977	2983	3031
R^2	0.606	0.607	0.608	0.003	0.625	0.626	0.626	-0.008	0.597	0.597	0.597	-0.009	0.875	0.875	0.878	-0.064	0.959	0.960	0.960	0.002

p-value in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	(12a)	(12b)	(12c)	(12d)	(13a)	(13b)	(13c)	(13d)	(14a)	(14b)	(14c)	(14d)	(15a)	(15b)	(15c)	(15d)	(16a)	(16b)	(16c)	(16d)
	1 Yr Mobility				**5 Yr Mobility**				**Indigenous Population Composition**				**Crime Severity**				**Violent Crime Severity**			
Treatment - CBA	-0.009	-0.009	-0.009	0.025	0.009	0.009	0.008	0.071+	-0.010	-0.010	-0.013	-0.002	21.85	21.37	24.44	114.6**	35.81	34.86	40.75	57.52
	(0.376)	(0.393)	(0.377)	(0.194)	(0.558)	(0.533)	(0.635)	(0.074)	(0.229)	(0.223)	(0.163)	(0.936)	(0.152)	(0.154)	(0.118)	(0.008)	(0.215)	(0.220)	(0.175)	(0.512)
Controls																				
Modern Treaty		-0.015	-0.017	-0.019+		-0.024	-0.028	-0.023		0.006	0.001	0.007		-67.10***	-63.93***	-65.29***		-136.2***	-130.1***	-137.4***
		(0.109)	(0.121)	(0.051)		(0.294)	(0.279)	(0.295)		(0.672)	(0.932)	(0.600)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Historical use rights		0.002*		0.003		0.003*		0.005+		0.001		0.001		-0.972		1.122		1.097		1.651
		(0.047)		(0.161)		(0.015)		(0.100)		(0.296)		(0.251)		(0.656)		(0.412)		(0.483)		(0.486)
Interaction Treaty x CBA			0.011				0.021				0.032*				-48.84+				-94.22**	
			(0.636)				(0.616)				(0.027)				(0.079)				(0.001)	
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Project	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Strata	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Community																				
Constant	0.869***	0.868***	0.870***		0.613***	0.613***	0.615***		0.897***	0.895***	0.897***		161.4***	164.5***	163.7***		204.2***	208.5***	209.0***	
	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	
N	2829	2823	2829	2877	2829	2823	2829	2877	2964	2958	2964	3012	2542	2542	2542	2575	2542	2542	2542	2575
R^2	0.378	0.378	0.378	-0.005	0.490	0.490	0.490	-0.012	0.896	0.896	0.896	0.000	0.748	0.749	0.749	-0.036	0.632	0.634	0.634	0.006

median family income of $21,559.10 (p=0.000). However, when we account for endogeneity within the 2SLS model (model 10d), we see that communities that are signatory to a CBA experience a median family income of $11,397.50 lower than those without a CBA. Therefore, our results suggest a negative treatment effect, such that treated communities experience a lower family income post-agreement, compared to the control group.

Lastly, in terms of economic value we consider the impact of a CBA on available housing within communities. Our initial basic model (model 11a) shows no significant treatment effect, although when adding controls (model 11b) we can see that communities with a modern treaty have 51.70 more dwellings (p=0.013) than those without a treaty. This effect remains consistent when using interaction terms (model 11c), or the 2SLS model (model 11d). Therefore, we conclude that the treatment has no impact on housing, although housing gains may be achieved through the possession of a modern treaty.

Community Social Value: We then shift our analysis to consider the impacts a CBA may have on social dimensions of value capture, specifically around community population composition, and crime severity. In considering how the composition of a community may evolve post-agreement, we specifically test the effects of a CBA on the 1- and 5-year mobility rates, and the percentage of the population that identifies as Indigenous. When exploring the effects on the 1-year mobility rates, that is the percentage of the population that has been living in that community for over 1 year, we see no significant direct treatment effects in the basic model (model 12a), although when adding controls, we see that communities with historical use rights have a slightly higher mobility percentage of 0.2% (p=0.047). However, when adding an interaction term or the 2SLS model, we see an absence of statistically significant results. This suggests that the treatment, or other controls, have no impact on 1-year mobility.

When considering community mobility at a 5-year interval, our results illustrate a slight increase of 0.3% (p=0.015) for communities with historical use rights (model 13b), with the possession of a modern treaty or CBA remaining insignificant (model 13b, model 13c, model 13d). Within the 2SLS model (model 13d) we see a marginally significant treatment effect, such that treated communities experience a 7.1% increase in mobility (p=0.074). This suggests that *more* community members have remained in the same community over the past five years, suggesting a higher level of community consistency.

Relatedly, we then explored the effect of a CBA on the composition of the community's population, specifically the proportion of Indigenous members relative to the total population. Our initial analysis, using the basic treatment model (model 14a) and added controls (model 14b) found no significant treatment or control effects. However, when we interact the controls with the treatment, we find that communities with a CBA and a modern treaty have an Indigenous population composition 3.4% (p=0.027) higher than those without, suggesting that they retain a higher percentage of Indigenous community members within their territory. However, when using the 2SLS model (model 14d) the significance of this effect diminishes.

Lastly, we explore the treatment effects on a community's crime, and violent crime, severity index scores. When using the basic treatment model for crime severity, and violent crime severity (models 15a and 16a respectively) we find no significant effect of the CBA. However, when we add controls to the model (models 15b and 16b respectively) we see that a modern treaty reduces crime severity by 67.10 index points (p=0.000) and violent crime severity by 136.2 index points (p=0.000). This effect remains unchanged when interacting the possession of a modern treaty with the possession of a CBA (model 15c and 16c), while the possession of both a CBA and modern treaty reduces the crime severity and violent crime severity even further, but 48.84

(p=0.079) and 94.22 (0.001) respectively. This modern treaty effect continues when using a 2SLS model (models 15d and 16d), while crime severity increases for treated communities by 114.6 index points (p=0.008). In conclusion, having a CBA has a negative treatment effect through increasing a community's crime severity index scores, although the possession of a modern treaty significantly lowers a community's crime, and violent crime severity scores.

DISCUSSION AND CONTRIBUTION

While the literature has recognized that non-equity stakeholders can appropriate value from their relationships with firms (Brandenburger & Stuart, 1996; Garcia-Castro & Aguilera, 2015), our understanding of this process remains in development and has primarily relied upon untested theoretical arguments (Barney, 2018). Value capture outcomes have been theoretically predicted by a stakeholder's bargaining power (Brandenburger & Stuart, 1996), strong negotiation skills (Barney, 2018), coalition strength (Asmussen et al., 2020), and the presence of conducive institutional factors (Ramírez & Tarziján, 2018); however, these arguments remain empirically untested when considering community stakeholder's appropriation of economic and non-economic elements of value. Therefore, this study used a quantitative difference-in-difference model to assess whether strong bargaining power (reflective of the formalization of a community benefit agreement) influences various community value capture outcomes, including individual and community-level indicators of economic and social dimensions of value.

Our analysis uncovers several interesting and counterintuitive findings. First, we find limited evidence to support the theoretical argument that stakeholders with higher bargaining power capture more value than those with lower bargaining positions. When we consider the isolated impact of the CBAs within the 2SLS models, our results often illustrate a neutral, or even

negative treatment effect. This is in stark contrast to prior research, which would suggest that communities that are signatory to a CBA would experience higher value capture outcomes as they have contractually secured additional benefits in exchange for their contribution of access to local natural resources (T. Gunton et al., 2021; O'Faircheallaigh, 2021). However, our research finds a *negative* treatment effect within the context of income and educational outcomes, two terms consistently included within CBAs (Cascadden, Gunton, & Rutherford, 2021; Szoke-Burke & Werker, 2021), as signatory communities have a lower median family income, and a lower proportion of university certificate and degree graduates than communities without an agreement. As illustrated, our empirical findings challenge the predictive validity of bargaining power as a theoretical determinant of value capture outcomes, often finding a negligible statistical effect on both individual and community-level indicators of economic and social value dimensions.

Second, we find a unique dynamic between the bargaining power solidified through a CBA and the institutional rights obtained through a modern treaty. Our results align with previous studies that have found several socio-economic benefits of modern treaties (Aragon, 2015; Aragon & Kessler, 2020), with these communities experiencing higher economic and social outcomes post-agreement. Specifically, our results found that the possession of a modern treaty led to higher housing, increased individual income, and lower crime rates. However, our results extend beyond the scope of prior research (Aragon, 2015; Aragon & Kessler, 2020) also finding negative effects of a modern treaty, such as lower university educational attainment and labour market indicators. This negative effect may simply appear as our data is geographically delimited, illustrating an outward migration of educated Indigenous citizens. This form of capacity depletion is not new within Indigenous communities, as elders state “for so many years now, we've sent so many of our young people away for further education, and we're STILL waiting for them to come home" (Ball,

2004, p. 458). However, in comparison to a CBA, possessing a modern treaty has a broader positive impact on social and economic outcomes. For example, the isolated effect of possessing a modern treaty was positive and significant across four of the value indicators, whereas the isolated effect of the CBA was positive and significant for only one value indicator. Although the effect of a modern treaty appears to overshadow the effect of a CBA, when combined, there may be a synergistic effect on specific indicators of social and economic dimensions of value. For example, we see a significant increase in individual and family income, community composition, and percentage of trade certificates for communities with *both* a modern treaty and CBA.

This paper aims to make several contributions to the value-based strategy literature. First, this study contributes to our understanding of stakeholder value capture processes and the need for more nuanced predictors of value capture beyond stakeholder bargaining power. Prior theoretical frameworks have represented value capture outcomes as the achievement of an implicit or explicit agreement within the temporal periods of an exchange (Brandenburger & Stuart, 1996; Coff, 1999); however, this study empirically establishes that despite having the bargaining power to contractually secure these elements of value, stakeholders may be unable to realize these benefits post-agreement. For example, while many CBAs include terms related to the funding of training and education of community members (Adebayo & Werker, 2021), we find evidence that suggests that communities that are signatories to a CBA have *no impact* on trades certification, and even *lower* university educational attainment post-agreement, meaning they have *lower* value capture outcomes than communities without an agreement. This illustrates an important boundary condition to the effect of bargaining power on value capture and instead points to the need to understand the *context* in which these exchanges occur.

Second, this study exemplifies the nuance and complexity within the concept of value capture, requiring that we clarify and articulate the distinct dimensions of value capture under study. While economic elements of value have been the predominant focus of research (Cabral et al., 2019; Harrison & Wicks, 2013), by expanding the conception of value capture to reflect distinct elements of both economic and non-economic elements of value, the outcome of value capture becomes inherently more complex. This study further problematizes our simplified understanding of value capture in relation to *value destruction.* For example, our results demonstrate how community stakeholders may experience value destruction in terms of education, labour, or crime indicators post-agreement, while simultaneously capturing value in income. Therefore, community stakeholders may simultaneously capture value, and have value destroyed, as a result of their participation with a firm. Theoretically, it is argued that a stakeholder would withdraw their support from a firm in the case of value destruction, as this would violate the consistency assumption, which states that stakeholders must capture more value than they could independently produce (Gans & Ryall, 2017; Ramírez & Tarziján, 2018). Violations of this assumption are predicted to result in stakeholder renegotiation or exit from the nexus (Coff, 1999); however, our study suggests that stakeholders may remain in value-destroying nexuses due to ambivalent value capture, reflective of value capture and destruction across various dimensions, and institutional constraints that may limit stakeholder exit.

Lastly, this study also expands our understanding of an undertheorized stakeholder while emphasizing the stakeholder perspective. Specifically, this study extends stakeholder theory and value capture theorization beyond common stakeholders, such as consumers, employees, and suppliers, to explore the unique characteristics of local communities (Dunham, Freeman, & Liedtka, 2006; Murphy & Arenas, 2010). As communities have emerged as critical stakeholders

within the extractive industry, this study extends and expands our understanding of how these stakeholders differ from others in their ability to capture value. Unlike employees or stakeholders, community stakeholders balance individual and community-level accrued benefits and balance the effects of property rights and bargaining power. In addition to highlighting communities as important stakeholders, this study also enhances our understanding of communities by grounding this research within an Indigenous context, whereby Indigenous communities are central rightsholders. The positioning of Indigenous communities as *rightsholders*, instead of stakeholders, has been a growing discussion within academic and practitioner spaces, highlighting the need to recognize Indigenous sovereignty and specific legal standing in relation to territory and consultation obligations (Darling, Harvey, & Hickey, 2023), which extend beyond those of more common stakeholder interests (Pomart, 2020). In addition, this study answers recent calls for further research which adopts the stakeholder perspective, in contrast to a firm perspective (Den Hond & De Bakker, 2007; Ehrnstrom-Fuentes, 2016). Dorobantu and Odziemkowska (2017) have shown how the announcement of CBAs allows a firm's shareholder to capture excess value; however, this study provides an alternative perspective to this story, showing the marginal and at times, negative implications of these agreements for community stakeholders, the ones intended to benefit the most from these agreements!

Despite the novelty of these findings, this study has several limitations, which could be addressed in future research. First, the dataset is limited to a narrow set of social and economic indicators, but would greatly benefit from the inclusion of environmental, cultural, and health data, which would be useful for gaining a broader and more realistic understanding of value capture or destruction. This limitation stems from a lack of consistent data within the national Canadian context that made it difficult to gather longitudinal national data specific to each community for

these factors; however, alternative methodologies may allow for a broader exploration of these impacts. Within the context of mining projects, prior research has emphasized the environmental (Conde & Le Billon, 2017; Oh, Shapiro, Ho, & Shin, 2020) and social impacts (Petrova & Marinova, 2013) of large development projects, requiring further research to understand the mechanisms that support or hinder environmental or social dimensions of value capture. Second, the dataset is aggregated at a community-level of analysis; therefore, variation or changes *within* the community are not captured, leaving a possibility for widening inequalities to go undetected. Therefore, by extending the analysis to individual-level data, researchers could examine the variation of value capture outcomes within a single stakeholder group, illustrating the presence of value inequalities, and how marginalized individuals may be disproportionally impacted. Third, this study considers value capture outcomes in isolation, whereas further insights could be gained by considering the holistic impact of these effects and stakeholder perceptions of these collective impacts. For example, our research illustrates that stakeholders may simultaneously capture value, and have value destroyed, so the ways in which stakeholders perceive and make sense of these holistic changes require further research. Lastly, this study relies on predetermined notions of value; however, community definitions and perceptions of value capture and destruction differ across nations and are extremely important in understanding these outcomes. Therefore, we hope future qualitative research will explore the individual perceptions and conceptions of value to aid in the conceptual clarity of the concept.

This research also has important practical contributions. Extractive firms have been shown to dedicate significant resources to successfully negotiate and implement contractual stakeholder governance mechanisms (CBAs are estimated to cost up to 4% of a firm's gross revenue); this investment is often blindly made with few guarantees that it will have the desired outcome

(Adebayo & Werker, 2021; Dorobantu & Odziemkowska, 2017). Surprisingly, this study shows that CBAs create little benefit for the communities they have been developed for, questioning the underlying usefulness and motivation of using such a tool. While firms may justify CBAs as a way of reducing risk in their environment (Odziemkowska & Dorobantu, 2021), these findings also disrupt these underlying assumptions, as communities unable to realize tangible benefits may be more likely to engage in extrainstitutional tactics, such as protests and blockades, thereby increasing risk in the environment. This research also offers practical benefits for local communities, as it limits information asymmetries between communities and firms by allowing communities to learn from the experiences of others. Also, it provides a realistic representation of possible long-term outcomes communities may expect post-agreement, allowing them to have a fuller understanding of changes in community-level indicators.

REFERENCES

Adebayo, E., & Werker, E. (2021). How much are benefit-sharing agreements worth to communities affected by mining? Resources Policy, 71, 101970.

Amit, R., & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. Strategic Management Journal, 14(1), 33-46.

Angrist, J. D., & Pischke, J.-S. (2009). Mostly Harmless Econometrics

An Empiricist's Companion: Princeton University Press.

Aragon, F. M. (2015). Do better property rights improve local income?: Evidence from First Nations' treaties. Journal of Development Economics, 116, 43-56.

Aragon, F. M., & Kessler, A. S. (2020). Property rights on First Nations reserve land. Canadian Journal of Economics-Revue Canadienne D Economique, 53(2), 460-495.

Arenas, D., Murphy, M., & Jáuregui, K. (2020). Community Influence Capacity on Firms: Lessons from the Peruvian Highlands. Organization Studies, 0170840618814567.

Asgari, N., Singh, K., & Mitchell, W. (2017). Alliance portfolio reconfiguration following a technological discontinuity. Strategic Management Journal, 38(5), 1062-1081.

Asmussen, C. G., Foss, K., Foss, N. J., & Klein, P. G. (2020). Economizing And Strategizing: How Coalitions And Transaction Costs Shape Value Creation And Appropriation. Strategic Management Journal.

Baker, A. C., Larcker, D. F., & Wang, C. C. Y. (2022). How much should we trust staggered difference-in-differences estimates? Journal of Financial Economics, 144(2), 370-395.

Ball, J. (2004). As If Indigenous Knowledge and Communities Mattered: Transformative Education in First Nations Communities in Canada. American Indian Quarterly, 28(3/4), 454-479.

Barker, A. J., Rollo, T., & Lowman, E. B. (2016). Settler colonialism and the consolidation of Canada in the twentieth century. In The Routledge handbook of the history of settler colonialism (pp. 173-188): Routledge.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. Journal of Management, 17(1), 99-120.

Barney, J. (2001). Is the Resource-Based “View” a Useful Perspective for Strategic Management Research? Yes. Academy of Management Review, 26(1), 41-56.

Barney, J. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. Strategic Management Journal, 39(13), 3305-3325.

Barney, J. (2020). Measuring Firm Performance in a Way that Is Consistent with Strategic Management Theory. Academy of Management Discoveries, 6(1), 5-7.

Berck, P., & Villas-Boas, S. B. (2016). A note on the triple difference in economic models. Applied Economics Letters, 23(4), 239-242.

Bowman, C., & Ambrosini, V. (2000). Value Creation Versus Value Capture: Towards a Coherent Definition of Value in Strategy. British Journal of Management, 11(1), 1-15.

Brandenburger, A. M., & Stuart, H. (1996). Value-based business strategy. Journal of Economics & Management Strategy, 5(1), 5-24.

Cabral, S., Mahoney, J. T., McGahan, A. M., & Potoski, M. (2019). Value creation and value appropriation in public and nonprofit organizations. Strategic Management Journal, 40(4), 465-475.

Cain, C. (2014). Negotiating With the Growth Machine: Community Benefits Agreements and Value-Conscious Growth. Sociological Forum, 29(4), 937-958.

Call, M. L., & Ployhart, R., E. (2021). A Theory of Firm Value Capture from Employee Job Performance: A Multi-Disciplinary Perspective. Academy of Management Review.
Callaway, B., & Sant'Anna, P. H. C. (2021). Difference-in-Differences with multiple time periods. Journal of Econometrics, 225(2), 200-230.
Cascadden, M., Gunton, T., & Rutherford, M. (2021). Best practices for Impact Benefit Agreements. Resources Policy, 70, 101921.
CBC News. (2010, November 09). Sask. potash venture includes First Nation. Retrieved from https://www.cbc.ca/news/canada/saskatchewan/sask-potash-venture-includes-first-nation-1.907403
CBC News. (2014). Muskowekwan band members approve potash deal, chief says. Retrieved from https://www.cbc.ca/news/canada/saskatchewan/muskowekwan-band-members-approve-potash-deal-chief-says-1.2621019
Cengiz, D., Dube, A., Lindner, A., & Zipperer, B. (2019). The Effect of Minimum Wages on Low-Wage Jobs*. The Quarterly Journal of Economics, 134(3), 1405-1454.
Certo, S. T., Busenbark, J. R., Woo, H.-s., & Semadeni, M. (2016). Sample selection bias and Heckman models in strategic management research. Strategic Management Journal, 37(13), 2639-2657.
Clougherty, J. A., Duso, T., & Muck, J. (2016). Correcting for Self-selection Based Endogeneity in Management Research:Review, Recommendations and Simulations. Organizational Research Methods, 19(2), 286-347.
Coff, R. W. (1999). When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power. Organization science, 10(2), 119-133.
Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128-152.
Conde, M., & Le Billon, P. (2017). Why do some communities resist mining projects while others do not? The Extractive Industries and Society, 4(3), 681-697.
De Stefano, F., Bidwell, M., & Camuffo, A. (2022). Do managers capture the value they create? Drivers of managers' value capture in a large retail chain. Strategic Management Journal, 43(10), 1983-2011.
Den Hond, F., & De Bakker, F. G. A. (2007). Ideologically motivated activism: How activist groups influence corporate social change activities. Academy of Management Review, 32(3), 901-924.
Dimick, J. B., & Ryan, A. M. (2014). Methods for Evaluating Changes in Health Care Policy: The Difference-in-Differences Approach. JAMA, 312(22), 2401-2402.
Dorobantu, S., & Odziemkowska, K. (2017). Valuing Stakeholder Governance: Property Rights, Community Mobilization, and Firm Value. Strategic Management Journal, 38(13), 2682-2703.
Drawson, A. S., Toombs, E., & Mushquash, C. J. (2017). Indigenous Research Methods: A Systematic Review. International Indigenous Policy Journal, 8(2).
Dunham, L., Freeman, R., & Liedtka, J. (2006). Enhancing stakeholder practice: a particularized exploration of community. Business Ethics Quarterly, 16(1), 23-42.
Ehrnstrom-Fuentes, M. (2016). Delinking Legitimacies: A Pluriversal Perspective on Political CSR. Journal of Management Studies, 53(3), 433-462.
Gans, J., & Ryall, M. D. (2017). Value capture theory: A strategic management review. Strategic Management Journal, 38(1), 17-41.

Garcia-Castro, R., & Aguilera, R. V. (2015). Incremental value creation and appropriation in a world with multiple stakeholders. Strategic Management Journal, 36(1), 137-147.
Gibson, G., & Klinck, J. (2005). Canada's resilient north: the impact of mining on aboriginal communities. Pimatisiwin, 3(1), 116-139.
Gormley, T. A., & Matsa, D. A. (2011). Growing out of trouble? Corporate responses to liability risk. The Review of Financial Studies, 24(8), 2781-2821.
Gunton, T., Werker, E., & Markey, S. (2021). Community benefit agreements and natural resource development: Achieving better outcomes. Resources Policy, 73, 102155.
Hamilton, B. H., & Nickerson, J. A. (2003). Correcting for Endogeneity in Strategic Management Research. Strategic Organization, 1(1), 51-78.
Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. Strategic Management Journal, 31(1), 58-74.
Harrison, J. S., & Wicks, A. C. (2013). Stakeholder Theory, Value, and Firm Performance. Business Ethics Quarterly, 23(1), 97-124.
Iacus, S. M., King, G., & Porro, G. (2012). Causal inference without balance checking: Coarsened exact matching. Political analysis, 20(1), 1-24.
Kovach, M. (2010). Indigenous methodologies: Characteristics, conversations, and contexts: University of Toronto Press.
Lee, S., & Puranam, P. (2017). Incentive Redesign and Collaboration in Organizations: Evidence from a Natural Experiment. Strategic Management Journal, 38(12), 2333-2352.
Lieberman, M. B., Balasubramanian, N., & Garcia-Castro, R. (2018). Toward a dynamic notion of value creation and appropriation in firms: The concept and measurement of economic gain. Strategic Management Journal, 39(6), 1546-1572.
Lieberman, M. B., Garcia-Castro, R., & Balasubramanian, N. (2017). Measuring value creation and appropriation in firms: The VCA model. Strategic Management Journal, 38(6), 1193-1211.
Lim, N., Kim, S., & Agarwal, R. (forthcoming). Weathering a demand shock: The impact of prior vertical scope on post-shock firm response. Strategic Management Journal, n/a(n/a).
Mckinlay, S. M. (1977). Pair-Matching - Reappraisal of a Popular Technique. Biometrics, 33(4), 725-735.
Murphy, M., & Arenas, D. (2010). Through Indigenous Lenses: Cross-Sector Collaborations with Fringe Stakeholders. Journal of Business Ethics, 94, 103-121.
Nelson, R. R., & Winter, S. G. (1982). An evolutionary theory of economic change.
Nickerson, J. A., & Zenger, T. R. (2004). A knowledge-based theory of the firm—The problem-solving perspective. Organization science, 15(6), 617-632.
O'Faircheallaigh, C. (2015a). Negotiations in the indigenous world: Aboriginal peoples and the extractive industry in Australia and Canada.
O'Faircheallaigh, C. (2015b). Social Equity and Large Mining Projects: Voluntary Industry Initiatives, Public Regulation and Community Development Agreements. Journal of Business Ethics, 132(1), 91-103.
O'Faircheallaigh, C. (2021). Explaining outcomes from negotiated agreements in Australia and Canada. Resources Policy, 70, 101922.
Odziemkowska, K., & Dorobantu, S. (2021). Contracting Beyond the Market. Organization science, 32:3, 776-803.

Oh, C. H., Shapiro, D., Ho, S. S. H., & Shin, J. (2020). Location matters: Valuing firm-specific nonmarket risk in the global mining industry. Strategic Management Journal, 41(7), 1210-1244.
Parks, V., & Warren, D. (2009). The politics and practice of economic justice: Community benefits agreements as tactic of the new accountable development movement. Journal of Community Practice, 17(1-2), 88-106.
Pendakur, K., & Pendakur, R. (2021). The Impact of Self-Government, Comprehensive Land Claims, and Opt-In Arrangements on Income Inequality in Indigenous Communities in Canada. Canadian Public Policy, 47(2), 180-201.
Perraillon, M. C., Lindrooth, R., & Welton, J. M. (2019, 2019 November-December). Difference-in-Difference Research Designs. Nursing Economics, 37(6), 328+. Retrieved from https://link.gale.com/apps/doc/A610341387/AONE?u=anon~30101712&sid=googleScholar&xid=c65be2c8
Peteraf, M. (1993). The cornerstones of competitive advantage: a resource-based view. Strategic Management Journal, 14(3), 179-191.
Peteraf, M., & Barney, J. (2003). Unraveling the resource-based tangle. Managerial and Decision Economics, 24(4), 309-323.
Petrova, S., & Marinova, D. (2013). Social impacts of mining: Changes within the local social landscape. Rural Society, 22(2), 153-165.
Quinless, J. (2021). Decolonizing Data: Unsettling Conversations about Social Research Methods: University of Toronto Press.
Ramírez, C., & Tarziján, J. (2018). Stakeholder value appropriation: The case of labor in the worldwide mining industry. Strategic Management Journal, 39(5), 1496-1525.
Rumelt, R. P., Schendel, D., & Teece, D. J. (1991). Strategic management and economics. Strategic Management Journal, 12(S2), 5-29.
Smith, L. T. (1999). Decolonizing methodologies: Research and indigenous peoples: Zed Books Ltd.
Snow, J. (1856). On the mode of communication of cholera. Edinburgh medical journal, 1(7), 668.
Sosa, I., & Keenan, K. (2001). Impact benefit agreements between aboriginal communities and mining companies: Their use in Canada: Canadian Environmental Law Association Ottawa.
Stoelhorst, J. W. (2021). Value, rent, and profit: A stakeholder resource-based theory. Strategic Management Journal, 1-26.
Sweet, V. (2013). Extracting more than resources: human security and Arctic indigenous women. Seattle UL Rev., 37, 1157.
Szoke-Burke, S., & Werker, E. (2021). Benefit sharing, power, and the performance of multi-stakeholder institutions at Ghana's Ahafo mine. Resources Policy, 71, 101969.
The Canadian Press. (2011). Potash deal worries Sask. First Nation members. Retrieved from https://www.cbc.ca/news/canada/saskatchewan/potash-deal-worries-sask-first-nation-members-1.1037886
Uchtmann, D. L. (1977). Coal, Farmers, and the Collective Sale of Mineral Rights. Illinois Agricultural Economics, 17(1), 1-7.
Walter, M. (2010). The politics of the data: How the Australian statistical Indigene is constructed. International Journal of Critical Indigenous Studies, 3(2), 45-56.
Walter, M., & Andersen, C. (2016). Indigenous statistics: A quantitative research methodology: Routledge.

Walter, M., & Suina, M. (2019). Indigenous data, indigenous methodologies and indigenous data sovereignty. International Journal of Social Research Methodology, 22(3), 233-243.
Williamson, O. E. (1981). The Economics of Organization: The Transaction Cost Approach. American Journal of Sociology, 87(3), 548-577.
Wing, C., Simon, K., & Bello-Gomez, R. A. (2018). Designing difference in difference studies: best practices for public health policy research. Annu Rev Public Health, 39(1), 453-469.
Winter, S. G. (1995). Four Rs of Profitability: Rents, Resources, Routines, and Replication. In C. A. Montgomery (Ed.), Resource-Based and Evolutionary Theories of the Firm: Towards a Synthesis (pp. 147-178). Boston, MA: Springer US

CHAPTER 3 (ARTICLE #3): A CONFIGURATIONAL APPROACH TO COMMUNITY VALUE CAPTURE.

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Abstract

The concept of value-based strategy (VBS) is an emerging topic within the strategic management field, as it aims to account for the creation and distribution of value between a firm's various stakeholders. While the economic assumptions within these theories may aid in understanding the negotiated division of economic elements, the determinants that enable community stakeholders to capture (or internalize) a range of economic benefits from these relationships remain unexplored. Therefore, I use fuzzy set qualitative comparative analysis (fsQCA) to examine the community-level impacts of mining projects within Canada, exploring value capture outcomes for Indigenous community stakeholders. This research uncovers how stakeholder bargaining power may be a necessary, yet insufficient, condition of value capture. Instead, our findings suggest how stakeholders utilize their complimentary resources to capture economic value, despite low bargaining power positions. These findings enhance our understanding of community stakeholder value capture by offering an empirical measurement that accounts for opportunity costs and articulating different stakeholder strategies for capturing value.

Keywords: value capture, community stakeholders, Indigenous Peoples, Value-Based Strategy (VBS), fsQCA

INTRODUCTION

Value-based strategy (VBS) is an emerging topic within the strategic management field and aims to account for the creation and distribution of value between firms and various stakeholders (Barney, 2020, p. 431; Coff, 1999). Value capture, defined as "the amount of value appropriated by relevant stakeholders" (Call & Ployhart, 2021, p. 574), is a primary area of study which has produced several theories that explain how stakeholders (such as suppliers, consumers, shareholders, etc.) contribute value-generating resources to the firm and are thereby residual claimants to any value created as a result (Barney, 2018). Differences in value capture are primarily studied in the context of a single market transaction and are explained by differences in bargaining power (Brandenburger & Stuart, 1996), negotiation skills (Barney, 2018), and, more recently, institutional and market contexts (Molloy & Barney, 2015; Ramírez & Tarziján, 2018). Theoretically, value capture is deemed to exist when a stakeholder receives compensation above their opportunity cost (Coff, 1999) and has been empirically reflected in employee wages (De Stefano et al., 2022) and stock price metrics (Lieberman et al., 2018; Lieberman et al., 2017). Overall, this literature has generated important insights into the process by which value is created and distributed amongst a nexus of stakeholders.

However, while the economic assumptions within these theories may aid in understanding the negotiated division of economic elements, the determinants that enable community stakeholders to actually capture, or internalize, a range of economic and non-economic benefits from these relationships remain relatively unexplored. The exclusive attention to economic elements of value has led to the implicit assumption that the negotiation and contractual agreement between stakeholders is the primary dependent variable to be explained, and bargaining power is the primary determinant of this value capture (Barney, 2018; Coff, 1999). These assumptions are

problematic for several reasons. First, this approach implicitly assumes that stakeholders can consistently and homogenously internalize these benefits, which evidence has shown is not necessarily the case (Adebayo & Werker, 2021; De Stefano et al., 2022), leaving the remaining process of internalization left unexplored. Second, while stakeholders certainly capture economic elements within the context of a market transaction, the variance in post-transaction value capture can no longer be explained by differences in bargaining power, especially in contexts that legally limit stakeholders' ability to renegotiate. Third, linear and simplistic assumptions are embedded within these theories, assuming that greater bargaining power automatically leads to greater value capture and ignores possibilities of equifinality (O'Faircheallaigh, 2021). As a result, the existing literature struggles to explain the variety of value capture processes outside of these narrow time and space boundaries informed by economic assumptions. Thus, while informative of hypothetical situations and negotiation processes, much of this prior work remains detached from realistic value distribution and capture processes among stakeholder groups.

Therefore, this paper aims to empirically explore the determinants of community stakeholder value capture, specifically the contextual and stakeholder-specific characteristics that enable community stakeholder value capture. This theoretical development primarily draws upon arguments within the resource-based view (RBV) of the firm and configurational theory to adopt a holistic perspective that accounts for equifinality and reciprocal and nonlinear relationships among variables (Meyer, Tsui, & Hinings, 1993). To do so, I compile a sample of ten development projects proximate to 141 Indigenous communities within Canada to explore the causal effects of bargaining power, contractual agreements, resource property rights, and contextual characteristics. Using the novel approach of fuzzy-set Qualitative Comparative Analysis (fsQCA), I isolate cases of successful value capture outcomes to identify combinations of attributes resulting in economic

value capture. Finally, I analyze these results in relation to the existing literature and discuss important implications for future research and theory.

The remainder of this paper begins by briefly reviewing configurational theory and value capture theory, emphasizing their key assumptions. It then introduces and develops a configurational theory of stakeholder value capture, drawing upon arguments from RBV. I then use a unique dataset of 141 Indigenous communities and QCA analysis to identify specific configurations that lead to positive community value capture outcomes. Finally, I analyze these results in relation to the existing literature and discuss important implications for future research and theory.

A BRIEF REVIEW – CONFIGURATIONAL THEORY

At its core, configurational theory resists simple linear, unidirectional, and reductionist inquiry to instead understand contexts as "complex systems of interdependency brought about by central orchestrating themes" (D. Miller, 1996, p. 506). Within this literature, several key assumptions are held. First, linear relationships (x leads to y) that are reflective of regression analysis are exchanged for nonlinear and dynamic relationships (Meyer et al., 1993). Nonlinear relationships challenge the premise that one additional unit of x leads to a measurable impact (β) on y, and instead adopts a holistic perspective that assumes there are tightly coupled systems, with the interaction among conditions creating nonlinear outcomes. Specifically, "variables found to be causally related in one configuration may be unrelated or even inversely related in another" (Meyer et al., 1993, p. 1178). In this way, the *configuration* (or bundle) of conditions becomes the primary focus, as variables in isolation are limited in explaining complex outcomes (D. Miller, 1996). Relatedly, relationships among conditions and configurations are not assumed to be reciprocal, such that if a combination

of variables is found to lead to an outcome, *x*b leads to y*, we cannot assume that the absence of these variables will lead to the inverse outcome *~x*~b leads to ~y* (Meyer et al., 1993). This leads to the third assumption of equifinality, or that different configurations may lead to the same outcome (Fiss, 2007; Kraus, Ribeiro-Soriano, & Schüssler, 2018). This allows for a higher level of nuance within the results, as it simultaneously analyzes and accounts for multiple pathways to an outcome.

In practice, configurational theory has primarily been understood and applied through the use of taxonomies, typologies, or a variable or characteristic that directly affects competitive advantage (D. Miller, 1996). Taxonomies are "empirical classification based on multivariate analysis of multiple dimensions that may cover structures, processes, strategies, and contexts" (Meyer et al., 1993, p. 1182), although they have been criticized for their lack of theoretical significance, an arbitrary and narrow selection of variables, and unreliable results (D. Miller, 1996). In contrast, typologies are configurations derived from conceptual or theoretical foundations (Meyer et al., 1993) but are often difficult to be applied empirically. Ultimately, the purpose of classifications is to "abstract and systematically explore key theoretical ideas" (Meyer et al., 1993, p. 1180), which can be beneficial beyond the simple description of the phenomenon (Meyer et al., 1993) to also allow for prediction (Tiryakian, 1968). Therefore, configurations must strongly rely on theory to guide and inform their development and utilization of ideal types, with ideal types (rather than categories) used to reflect fuzzy membership and marginal achievement of outcomes (Doty, Glick, & Huber, 1993).

THEORETICAL DEVELOPMENT – BEYOND BARGAINING POWER

Coff's (1999) model of stakeholder bargaining power was a foundational theoretical paper in the development of the value-based strategy (VBS) literature. This framework highlighted that an actor's ability to generate rents did not directly relate to their ability to capture these generated rents, thereby problematizing the assumption that value creation (rent generation) is equal to firm performance, as other stakeholders may capture the rent generated. Since this time, scholars have built upon this idea to establish that multiple stakeholders (inclusive of but beyond shareholders) contribute value-generating resources to the firm and may thereby become residual claimants to any added value that is created from the use of their resources (Barney, 2018; Coff, 1999; Peteraf & Barney, 2003). However, while stakeholders may contribute their resources to generate rents, the process in which these rents are divided and captured has been explored from a purely economic perspective (De Stefano et al., 2022). As such, theory development within the field has implicitly relied upon economic assumptions, primarily related to the impacts of bargaining power and negotiation skills.

Bargaining power has been the primary mechanism used to explain the level of value stakeholders may capture from the nexus, or group, of stakeholders involved with a specific firm (Barney, 2018; Brandenburger & Stuart, 1996). A stakeholder's bargaining power is a function of their competitive and persuasive bargaining power (Gans & Ryall, 2017; Stoelhorst, 2021). Competitive bargaining power is gained through the possession of valuable resources and is understood through economic principles, such as market competition dynamics (Brandenburger & Stuart, 1996; Gans & Ryall, 2017). Valuable resources are those that (a) can create rents when combined with other resources (valuable), (b) are difficult or expensive to replace (non-substitutable), (c) can be easily transferred to create value at another firm (low asset specificity), (d) and are less dependent upon other resources for generating rents (Barney, 2018; Coff, 1999).

However, a stakeholder's competitive bargaining power may be unequal to their total bargaining power as their pure bargaining power may prompt an under- or over-investment from other actors. Stakeholders differ in their pure bargaining power positions, as they differ in their ability and motivation to negotiate or persuade other actors of the value of their competitive resources (Gans & Ryall, 2017; Stoelhorst, 2021). For example, some stakeholders may possess valuable resources but choose not to act on this strong competitive positioning (Call & Ployhart, 2021) or be unable to "convince [their] counterpart(s) to cede some of the residual value that remains" (Stoelhorst, 2021, p. 10). For example, Call and Ployhart (2021) theorize how an "employee can perceive an idiosyncratic "fit" between the values of the firm and their own," creating a situation in which they voluntarily choose to accept less than their market value (capture less value), despite having a higher bargaining power position (Call & Ployhart, 2021, p. 578). In contrast, Harrison et al. (2010) illustrate how some stakeholders may be able to persuade others of the inflated value of their resources, leading to situations of 'over-investment' in certain stakeholder groups, allowing them to capture more value than otherwise merited (Bosse et al., 2009; Garcia-Castro & Aguilera, 2015; Harrison et al., 2010). While stakeholders differ in the resources they control (competitive bargaining) and their ability to persuade others of their value (pure bargaining), it is their relative bargaining power that primarily determines the amount of value they are able to capture from the nexus (Bridoux & Stoelhorst, 2014).

Although bargaining power has been the primary mechanism to explain variation in value capture outcomes, little is understood of the boundary conditions of this relationship. For example, as value capture has been primarily analyzed within the context of a market transaction (Coff, 1999), little is understood about the effects of bargaining power outside of these narrow temporal boundaries. Emerging research emphasizes the positive relationship between bargaining power

and value capture outcomes (Bridoux & Stoelhorst, 2014; Ryall, 2013; Stoelhorst, 2021) while recognizing that stakeholders may also choose not to exert their bargaining power within these negotiations (Call & Ployhart, 2021). However, this work theoretically relies on the implicit assumption that stakeholders are able to capture more value as possessing a higher bargaining power position allows you to negotiate for more benefits (reflective of potential value capture). For example, within the context of community stakeholders, Arenas et al. (2020) illustrate how the neighbouring communities of Pucará and Yauli are able to negotiate and contractually secure different types of community benefits from the focal firm. Within this study, and many others like it (e.g., C. Gunton, Gunton, Batson, Markey, and Dale (2021), O'Faircheallaigh (2021)) it is implied that communities that negotiate and contractually secure the most benefits have captured more value and are better off. This relies on the critical assumption that stakeholders are successful in internalizing any/all benefits that were negotiated and contractually secured. However, recent empirical evidence suggests that these benefits may be much harder to realize in practice, indicating that post-negotiation realities do not necessarily align with community expectations (O'Faircheallaigh, 2021; Szoke-Burke & Werker, 2021). Therefore, although a stakeholder may possess the bargaining power to formalize their claim, this does not guarantee the internalization and realization of these benefits.

VBS has primarily been understood through the lens of stakeholders within the supply chain, such as suppliers, customers, and employees (Barney, 2018; Brandenburger & Stuart, 1996), offering a limited understanding of the diversity of value capture contexts. Other stakeholders, such as local communities or governments, are recognized as residual claimants but are often disregarded or excluded due to the added complexity involved (Barney, 2018; Tantalo & Priem, 2016). For example, while the inclusion of local communities as a stakeholder has certainly been

a controversial debate (Phillips, Freeman, & Wicks, 2003), the need to better define the boundaries of 'community' (Dunham et al., 2006) can be achieved through clarifying whether these are communities of place, practice, users, or firms (Georgiou & Arenas, 2023). Communities of place, defined as communities "formed in geographic settings, which enable (and even enforce) frequent interaction among members and embody 'elements of local culture, norms, identity, and laws' (Georgiou & Arenas, 2023, p. 6) can at times become residual claimants to a firm's rents. As community stakeholders become residual claimants "when payments for making their resources available to a firm do vary with the actual economic profits generated by a firm ex post" (Barney, 2018, p. 3308), studying community stakeholder value capture within the context of extractive projects is fitting. This is because, within this specific context, community stakeholders exchange access to their local territories and natural resources (granting a social license to operate) to extractive firms, in exchange for employment and other forms of economic support (Adebayo & Werker, 2021; Szoke-Burke & Werker, 2021). Further, Indigenous communities have specific legal rights to their resources (Barelli, 2012; Murphy & Arenas, 2010), making them rightsholders, and granting them additional consideration from the firm. The recent push from both governments and Indigenous communities to use the term *rightsholder,* rather than stakeholder, reflects their inherent rights to sovereignty, land, and cultural practice (Darling et al., 2023), which extend beyond the common rights of other stakeholder groups (Pomart, 2020). Therefore, this context provides a consistent setting to measure and compare the mechanisms and outcomes by which community residual stakeholders can capture value from the stakeholder nexus.

AN INDIGENOUS-ALIGNED QCA METHOD

Research involving Indigenous Peoples or communities should reflect or incorporate the principles of Indigenous methodologies, as it ensures that Indigenous voices, worldviews, and epistemologies are privileged throughout the research process (Kovach, 2010; Smith, 1999). Within the management field, Indigenous methodologies are most often used with qualitative methods (Forster, Palmer, & Barnett, 2016; Price & Hartt, 2023), although use with quantitative methods is becoming more common (Quinless, 2021; Walter & Andersen, 2016). Irrespective of the specific method used, research should ensure that it reflects principles such as "a) empowering Indigenous peoples and governance systems in recognition of autonomy and self-determination, (b) knowledge cocreation in a safe and culturally appropriate manner, (c) privileging of Indigenous ontologies and epistemologies, and (d) the importance of recognizing past, current, and future relationships" (Salmon, Chavez, & Murphy, 2023, p. 467). Therefore, we design our research in alignment with the principles of Indigenous methodologies, using the QCA method as a tool to support our analysis.

Indigenous methodologies and western methods are braided, or integrated, throughout all research stages. First, within the research design phase, we prioritize research questions that aim to support Indigenous communities in their pursuit of autonomy and self-determination. Second, within the data collection phase, we acknowledge Indigenous People's rights to ownership, control, access, and possession (OCAP®) of their secondary data (FNIGC, 2014; Schnarch, 2004), and have informed each community of the study and given them an opportunity to withdraw their data from the sample. Third, within the data analysis phase, we carefully apply and interpret the fsQCA analysis through a strength-based lens that acknowledges that mainstream data reflects "items related to Indigenous difference, disparity, disadvantage, dysfunction and deprivation" (Walter & Suina, 2019, p. 235), which often produces conclusions of Indigenous deficit (Walter & Suina,

2019). Lastly, a report outlining the findings of this research will be shared directly with each community whose secondary data was originally collected, regardless of whether they chose to withdraw their data or not. This supports the right of all Indigenous communities to be informed about research and developments that affect them (Gilbert & Lennox, 2020; Kukutai & Taylor, 2016).

Fuzzy set qualitative comparative analysis (fsQCA) is an innovative method that accounts for (1) causal complexity, the acknowledgement that the specific presence/absence of attributes leads to an outcome, creating many pathways to the same outcome, and (2) causal asymmetry, the inversed conditions that lead to an outcome (Y) do not necessarily lead to the absence of the outcome (~Y), and the absence of the outcome (~Y) may require consideration of additional conditions (Fiss, 2011; Herrmann & Cronqvist, 2009; Kraus et al., 2018; Ragin, 2008). With these underlying assumptions, fsQCA uses set-theoretic reasoning to analyze cases as a configuration of attributes rather than decomposed variables, allowing for holistic and complex analysis (Fiss, 2011; Ragin, 2008). In addition, by focusing on the configuration of attributes, the context of the case is emphasized, allowing fsQCA to be an especially beneficial tool in situations involving interconnected and complex variables (Ragin, 2000).

The theoretical assumptions within QCA align with VBS in several ways, making it an appropriate method for use in this study. First, QCA's assumption of causal asymmetry aligns with the various existing theoretical explanations of VBS, acknowledging the complementary (not conflicting) mechanisms of bargaining power (Coff, 1999), institutional context (Ramírez & Tarziján, 2018), and perceptual judgements (Bridoux & Stoelhorst, 2014). Second, the field has been silent on the theoretical relationship between value capture and value destruction; therefore, QCA's assumption of causal asymmetry seamlessly aligns with VBS. In addition, QCA aligns with

the principles and realities of Indigenous research and experiences. First, QCA emphasizes the importance of holistic reasoning, and that analysis ought to remain grounded within its empirical context, aligning with the ontological and epistemological foundations of Indigenous methodologies (Kovach, 2010). Second, the method accounts for the unique variation and differences across Indigenous communities, as causal ambiguity recognizes that communities that share a single dimension (e.g., communities under an Indian Act governance structure) cannot be equated but rather need to be understood in relationship to their broader environment, as individual conditions interact with one another to produce significantly different outcomes (Fiss, 2007).

Data Sources

The data used within this analysis is collected from several unique sources. First, our sample is drawn from the complete list of 535 signed agreements between Indigenous communities and extractive firms within Canada, ranging from 1974 to 2020. This list captures a variety of different types of agreements (e.g., memorandum of understanding, exploration agreements, impact benefit agreements) that are negotiated between parties related to a specific mining or extractive project and is compiled and reported by Natural Resources Canada (NRCAN), the federal department responsible for resource development. Although the specific terms of these agreements remain confidential, this dataset provides comprehensive information regarding the signatories, project details, and dates of agreement. To reflect community stakeholder value capture outcomes, we use national census data (aggregated at a community level) reflecting specific elements of economic value capture, captured in 5-year increments.

From the initial sample of 535 signed agreements, we expanded and then narrowed down our sample. First, we expand our sample using GIS software to identify *all* Indigenous

communities within a 500km radius of the specific project. In doing so, we create a broad dataset of all communities neighbouring development projects, some signatories to an agreement and others not. This dataset is then narrowed in scope in several ways. First, all superseded agreements are excluded, as the date of supersession is not reported. Second, to isolate and minimize the effects of specific economic cycles, we temporally limit our sample to agreements signed between 2013 and 2017. This time period was chosen as it contained the most community agreements, and ensured our analysis produced current and actionable results for communities. Lastly, consistent economic data was not available for all communities; therefore, communities with limited data were excluded from the analysis. After these exclusions, our total sample is comprised of 117 communities for analysis of employment rate growth and 166 communities for analysis of individual income growth.

Conditions and Calibration

Calibration is the first step within QCA analysis and speaks to the process by which researchers operationalize conditions using set membership, providing them with a score on a spectrum ranging from full membership (1) or full non-membership (0) of the condition (Fiss, 2011; Ragin, 2008). Based on these assumptions of membership, a researcher may calibrate conditions using crisp sets, with cases being coded on a binary of full membership (1) or non-membership (0), or fuzzy sets, with cases being coded on their degree of membership, with 0.5 being the cross-over point (Fiss, 2007; Ragin, 2000). Using fuzzy sets, rather than crisp sets, is often superior as it retains a higher level of richness within the data (Herrmann & Cronqvist, 2009) while also forcing the research to "employ theoretical and substantive knowledge in the creation of the measure (Fiss, 2007, p. 1186). There are multiple strategies in which scholars can use their theoretical and

substantive knowledge to articulate the three calibration benchmarks of full membership, cross-over point, and non-membership (de Block & Vis, 2019), yet scholars are encouraged to refrain from sample-based thresholds (e.g. 95th percentile) as samples are not assumed to mirror the population, yet may be used when theoretical knowledge is absent (De Crescenzo, Ribeiro-Soriano, & Covin, 2020). Therefore, we use a variety of fuzzy set conditions within our analysis, calibrated using theoretical and experiential benchmarks; see Table 5 for an overview of the description, statistics, and calibration of all conditions.

Table 5 Description of Causal Conditions

Condition	Mean / SD	Description	Calibration
DV – Value Capture Outcome			
Employment Rate Growth	0.036 (9.698)	Measures the difference between the community's initial employment rate, and 5-years post-agreement	**Continuous fuzzy set** based on national population data: (+3%, +1%, 0%)
Individual Income Growth	7135.133 (5148.754)	Measures the difference between the community's initial individual median income, and 5-years post-agreement	**Continuous fuzzy set** based on national population data: ($8652, $4326, $0)
Bargaining Power Conditions			
Strong Legal Claim	0.141 (0.333)	Reflects a community's legal claim on value created, measured through the possession of different forms of legal agreements	4-value fuzzy set 0.0 – No agreement 0.2 - Engagement Agreement 0.6 - Participation Agreement 1.0 – Impact Benefit
Strong Property Rights	0.287 (0.307)	Reflects a community's legal rights to their territory, as viewed by the state government	6-value fuzzy set – Limited property rights +0.4 (historical treaty) +0.2 – +0.4 (community legislation) – Full Property rights
Initial Resources			
High Initial Employment Rate	40.406 (10.462)	The community's employment rate at the time the agreement was signed	Continuous fuzzy set (0.7, 0.5,0.3)
High Initial Individual Income	17,331.30 (5,342.80)	The median individual income within the community at the time the agreement was signed	Continuous fuzzy set ($36,000, $26,000, $12,000)
Ease of Access			
Proximity to Urban Center	0.477 (0.156)	The community's Index of Remoteness (IoR) score.	Continuous fuzzy set (0.15, 0.29,0.39)

Close Proximity to Site	202.871 (119.784)	Measures the distance between the community and the project.	Continuous fuzzy set (50, 150, 500)
Knowledge Equality			
Local Ownership	0.777 (0.400)	Reflects whether the project is owned by a local firm.	3-value fuzzy set 0.0 – International 0.4 – US, or UK 1.0 – Canadian
Value Creation Phase			
High Value Creation Phase	0.585 (0.358)	Reflects the stage of production and value creation the project is in at the time of signing	4-value fuzzy set 0.0 - Closed 0.3 – Feasibility 0.6 – Construction 1.0 - Operating

Community Economic Value Capture: Our key outcome of interest was economic value capture from a community stakeholder perspective and was operationalized in consideration of the specific context of extractive project agreements. Within this context, agreements signed between firms and communities often include components such as increased employment for local community members (Adebayo & Werker, 2021) and education and training resources (O'Faircheallaigh, 2013; Odziemkowska & Dorobantu, 2021) aimed at increasing local human capital stocks. Therefore, we chose to operationalize community economic value capture as the 5-year change in employment rates and individual median income post-agreement.

The employment rate reflects the number of people within the workforce as a percentage of the population over 15 years old (Statistics Canada, 2016). To calibrate this measure, the national average growth in employment for this specific 5-year period (+3%) was used as an empirical benchmark. As value capture gains *above* a stakeholder's opportunity cost, or the value they could gain in their next best alternative (Brandenburger & Stuart, 1996), we use the national average of 3% as full membership, with positive gains (over 1%) being the cross over point, and zero or negative gains as full non-membership. Although the cross-over point is based on the national population level, we use population (versus sample data) to set this benchmark as it

accounts for the larger institutional economic conditions that communities were embedded within and incorporates the theoretical concept of opportunity cost.

Next, individual median income reflects the individual income after splitting the sample into two equal halves (Statistics Canada, 2016). To calibrate this measure, we again relied on the national average increase of $4,326 during this same time period and used this as our cross-over point. We then used a buffer of $1,500 to determine our full membership ($5,826) and non-membership ($2,826) thresholds.

Bargaining Power Conditions: Bargaining power is operationalized through two unique conditions: possessing a strong legal claim to the value and strong property rights. First, community stakeholders may possess varying degrees of legal claim to specific value elements in exchange for their contribution of value-generating resources. Communities can negotiate and secure legally binding agreements with firms, which firms are required to uphold, at times, irrespective of firm performance (Dorobantu & Odziemkowska, 2017). However, there are various forms of agreements which vary in their robustness and strength of legal claim. Specifically, agreements such as MOUs or Exploration Agreements are often short-term with weaker commitments, while community benefit agreements or impact agreements are long-term commitments with comprehensive distributional obligations to the firm. In addition, Indigenous communities differ in the strength of the legally recognized property rights to their traditional territory, in which mining projects are often located (Odziemkowska & Dorobantu, 2021). Specifically, communities with modern treaties have the strongest form of property rights, while communities under federal jurisdiction often have the most ambiguous rights (Alcantara, 2007; Aragon, 2015; Aragon & Kessler, 2020).

Contextual Conditions: Community-firm relationships are embedded within unique contexts in which communities possess different resources, ease of access based on physical location, and the ability to leverage their local knowledge and authority. In addition, the relationship is embedded within a nexus that evolves according to the value they can collectively co-create. These contextual characteristics are operationalized in several ways, including:

1. *Initial Resources*: Communities have different starting points within their relationships, specifically related to their initial employment and income levels. These initial resource levels can reflect the level of excess capacity or slack resources or the ability to leverage additional resources. For example, an initially high employment rate can reflect a lower percentage of slack human capital within the community with limited ability to capture newly created employment opportunities. In addition, high individual incomes can be leveraged to gain additional resources, such as education. In the absence of theoretical foundations on what determines a *high* employment rate or individual income, we use our familiarity with our empirical cases and context to identify the full membership, and non-membership benchmarks. As the average employment rate for Indigenous Peoples was 55% in 2011, this was used as our cross-over point.
2. *Ease of Access*: Communities also differ according to their physical location and the ease with which this location grants them access to the firm or external resources and services. A community's ease in accessing the firm is operationalized as their proximity to the specific development site, with full membership (1) characterizing communities with better access (within 50 kilometres) to the site and non-membership (0) being limited access (over 500 kilometres). Relatedly, a community's access to external resources and services is operationalized through a community's remoteness index, with full-membership (1)

reflecting communities having consistent access to health, education, and social services (RI of 0.15 or lower) and non-membership (0) reflecting communities with limited access to these resources and services (RI of 0.39 or above) as per index standards (Subedi, Roshanafshar, & Greenberg, 2020).

3. *Knowledge Equality*: Within these dyads, community stakeholders have the ability to leverage their local authority and knowledge in different ways depending on the nationality of the firm (Petersen, Pedersen, & Lyles, 2008). For example, national firms located within Canada are more knowledgeable of the local context, consultation requirements, and norms around community stakeholder engagement. In contrast, foreign firms may suffer from a liability of foreignness that may stem from their "unfamiliarity with and lack of roots in a local environment" (Zaheer, 1995, p. 343), and therefore, local communities may be better able to leverage their local knowledge and networks to capture additional value. Therefore, dyads exemplifying knowledge equality among partners (full-membership) are formed with Canadian-based firms, while partnerships formed with neighbouring/similar countries are partially out (0.4), and other foreign-based firms reflect non-membership (0.0).
4. *Value Creation Phase*: Lastly, community relationships are embedded within a nexus that works to co-create value. As this study aims to understand the economic value captured by residual stakeholders, the stage of production of the project ought to influence value capture outcomes, as value capture is related to value creation (Stoelhorst, 2021). Specifically, if a firm is not creating value, then we would anticipate seeing decreased value capture outcomes, as there is limited value to be dispersed among the nexus. In contrast, stakeholder value capture should be greater in times of higher firm value creation phases. Empirically, we calibrate based on the stage of project development, with early phases such

as feasibility and construction, creating lower levels of economic value compared to the operating and production phases (Clements, Ahammad, & Qiang, 1996).

ANALYSIS

To analyze the dataset, we conduct both a necessity and sufficiency analysis using fsQCA 4.1 software for each economic element, specifically the growth of employment rates and individual income (Ragin, 2008). First, we conducted a necessity analysis, which aims to identify conditions that must be present to achieve an outcome, although they may be insufficient such that their presence does not automatically guarantee the presence of the outcome (Dul, 2016). In doing so, we adopt the consistency benchmark of 0.9 (Greckhamer, Furnari, Fiss, & Aguilera, 2018). Second, we conducted the sufficiency analysis, which develops a truth table and uses Boolean algebra to reduce the table through logical simplifications until a set of consistent configurations is identified (Fiss, 2007; Ragin, 2008). Within this analysis, the truth table is first reduced to reflect the frequency cut-off threshold of one case, as it retains the majority of the case sample (Greckhamer et al., 2018). Next, truth table rows were assessed on their consistency, which "gauges the degree to which the cases sharing a given combination of conditions … agree in displaying the outcome in question" (Ragin, 2008, p. 44); in other words, the degree in which cases with this same combination display the same outcome. A standard consistency benchmark is >0.80 (Greckhamer & Gur, 2021; Ragin, 2008); however, lower thresholds may be used depending on the individual study (Pappas & Woodside, 2021) although scores "less than 0.70 indicate substantial inconsistency" (Ragin, 2023, p. 1). Additionally, we considered PRI (proportional reduction inconsistency scores), which are "used to avoid simultaneous subset relations of configurations in both the outcome and the absence of the outcome" and should be greater than a

0.50 threshold (Pappas & Woodside, 2021, p. 10). Therefore, all rows above the consistency scores drop (0.763 for income) and PRI scores >0.50 were coded as 1, with the remaining rows coded as 0.

Following the coding of the truth table, we used the fsQCA software to identify parsimonious and intermediate solutions that reflected causal conditions that led to positive community value capture outcomes. Specifically, parsimonious solutions use counterfactual reasoning to produce a simplified solution that identifies the "core conditions" (Fiss, 2011) or conditions that cannot be omitted from a specific solution. In contrast, intermediate solutions use only the theoretically informed counterfactuals, thereby providing a more nuanced solution by including "peripheral conditions" (Fiss, 2011) or conditions less central to the outcome and possibly expendable or exchangeable. Following common practice within the field, we compare and contrast the parsimonious and intermediate solutions with each other to develop a solution table that visually reflects the core and peripheral conditions for each configuration (see table 7 and table 8). Finally, we examine the solution consistency, ensuring it remains above the 0.75 threshold (Pappas & Woodside, 2021) and coverage, reflecting how well the outcome can be explained by the identified solutions, comparable to an R-square statistic (Woodside, 2013).

FINDINGS

Step 1: Necessity Analysis

The necessity analysis aims to identify conditions that are *necessary*, they must be present for the outcome to occur, yet they may be *insufficient*, their presence alone doesn't guarantee the presence of the outcome (Dul, 2016). Therefore, we tested the necessity of all conditions in relation to the two outcomes of interest: employment rate growth and individual income growth. This analysis

explored the necessity of either the presence or absence of each individual condition, with our results in Table 6, with Model 1 considering the employment rate outcome and Model 2 considering the individual income outcome. As none of these conditions had a coefficient greater than our threshold of 0.9 (Greckhamer et al., 2018), we can conclude that no condition is individually *necessary* for community value capture to occur. In other words, the individual presence of any of the conditions (e.g., strong legal claim, strong property rights) is not necessary to achieve outcomes of high employment or income growth. As no conditions were necessary for the outcome to occur, we then shifted our analysis to consider which conditions, when together, are sufficient for creating the outcome.

Table 6 Necessity Analysis

Model 1: Growth of Employment			Model 2: Growth of Individual Income		
Item	Consistency	Coverage	Item	Consistency	Coverage
Strong Legal Claim	0.182	0.582	Strong Legal Claim	0.188	0.982
Strong Property Rights	0.320	0.518	Strong Property Rights	0.396	0.951
High Value Creation Phase	0.579	0.452	High Value Creation Phase	0.488	0.909
High Initial Employment Rate	0.198	0.345	High Initial Income	0.173	0.890
Proximity to Urban Center	0.145	0.562	Proximity to Urban Center	0.133	0.968
Proximity to Site	0.559	0.510	Proximity to Site	0.546	0.948
Local Ownership	0.701	0.417	Local Ownership	0.720	0.902

Step 2: Sufficiency Analysis

We report the results from our sufficiency analysis using 'Fiss tables', or 'configuration charts', with Table 7 illustrating configurations related to the outcome of changes in employment rate, and Table 8 illustrating configurations related to the outcome of changes in individual income. Within these tables, we follow accepted notation practices, such that a black circle (●) indicates the presence of the condition contributes to the presence of the outcome, a circle with an x (⊗)

indicates the absence of the condition contributes to the presence of the outcome, and a blank space indicates that the presence/absence of this condition is irrelevant (e.g., see Greckhamer (2016)). Further, the size of these notations is strategic, such that larger notations reflect core conditions while smaller circles reflect peripheral conditions. Core conditions emerge from the parsimonious solution and indicate a stronger causal relationship, while peripheral conditions emerge from the intermediate solution and suggest a weaker causal relationship (Fiss, 2007). I begin by discussing the individual configurations for the model that explores changes in employment rates (Table 7), followed by a discussion of the individual configurations for the model that explores the growth in individual income (Table 8). Following this, we offer a broader analysis of these different configurations across outcomes to generate insights about the theoretical mechanisms that may underly these findings.

Community Value Capture: Employment Rate Growth

Our analysis finds four configurations that lead to higher employment rate growth 5-years with are consistent (solution consistency = 0.782) and explanatory considering the complexity that contributes to employment rate growth (solution coverage 0.260) (see table 7 for all configurations). Interestingly, these configurations span several unique bargaining power positions and conditions, creating an opportunity for community stakeholders to capture employment value in multiple pathways. Despite these diverse pathways, there appears to be a relationship between bargaining power and the capture of value in high value-creation project phases, such that stakeholders with diminished bargaining power positions are able to capture value only in early

project stages, while higher bargaining power affords stakeholders the opportunity to gain power in all value-create phases.

Table 7 Employment Rate Growth Configuration Table

	High Employment Rate Growth					Not High Employment Rate Growth		
Bargaining Power	Low BP		Partial BP		High BP	Low BP		
	First Mover	Complimentary Resources	Limited Competition	Legal Enforcement		Crowded & Competitive Nexus		
Configuration	**1**	**2**	**3**	**4a**	**4b**	**5a**	**5b**	**5c**
Bargaining Power								
Strong Contractual Value Capture			●	●	●	⊗	⊗	⊗
Community Governance	⊗				•		⊗	⊗
Initial Resources								
High Employment Rate	⊗	⊗	⊗	⊗	⊗	●	●	●
Ease of Access								
Urban	⊗	●	⊗	⊗	⊗	⊗		⊗
Close to Site	⊗		●	⊗	⊗	⊗	⊗	
Value Creation Phase								
High Value Creation Phase	⊗	⊗	⊗	•		●	●	●
Knowledge Equality								
Domestic Ownership	⊗	●	⊗	●	●	•	•	•
Raw Coverage	0.103	0.057	0.066	0.034	0.031	0.212	0.197	0.250
Unique Coverage	0.100	0.054	0.048	0.010	0.006	0.009	0.007	0.060
Consistency	0.729	0.813	0.794	0.771	0.769	0.838	0.829	0.811
Overall Solution Coverage	0.260					0.279		
Overall Solution Consistency	0.782					0.827		

The first configuration, titled *First Mover,* illustrates how communities that lack formal bargaining power are able to quickly mobilize slack resources to capture value within the early phases of the project. Specifically, these communities, without close access to the project or an urban center, are able to realize an increase in their employment rate. Although these communities lack clearly defined property rights and are working with foreign firms, they are able to mobilize slack employment resources (reflective of their lower initial employment rates) to capture added value within the early stages of the value-creation process. This configuration is one of the most common configurations within our sample (raw coverage= 0.103) and reflects a common pathway to employment value capture. An example of this pathway is Tjipogtotjg's (also known as Buctouche MicMac Band) 6.3% increase in employment within the feasibility stage of the Donkin Mine

located in Nova Scotia. At the time, the project was owned by Kameron Coal, a subsidiary of the USA-based Cline Group, with Tjipogtotjg being positioned over 400km from the site, yet other neighbouring communities, of the mine saw up to a 12.4% *decline* of their employment rate during that same time.

The second configuration, titled *Complimentary Resources,* illustrates how communities are able to leverage their access to additional services and resources from urban settings to capture employment value. Similar to the first configurations, these communities may possess slack resources in terms of lower employment rates. As these communities lack a strong bargaining power position, employment value capture is limited to early project stages with limited value creation. Although this pathway is less common (raw coverage = 0.057), an example of this pathway is the Roseau River Anishinabe First Nation's employment value capture within the feasibility stage of the Rainy River Mine. At this time, the mine was owned by New Gold Inc, a Canadian mining company.

The third configuration, titled *Limited Competition,* reflects how community stakeholders with increased bargaining power are able to capture value from limited competition in the early stages. Specifically, communities within this configuration have secured strong contractual power stemming from their long-term agreements negotiated with foreign firm partners. Communities have a mix of complimentary resources, as they are positioned in close proximity to the site and have slack employment resources, although they are not proximate to an urban center. This pathway is slightly more common (raw coverage = 0.066), and an exemplar case of this configuration is Essisoqni Wutaniminu (also known as Eskasoni Mi'kmaw Nation) and the Impact Benefits Agreement they signed with Kameron Coal, a smaller subsidiary of the USA based Cline

Group. Essisoqni Wutaniminu was positioned relatively close to the mining location (59 km) and was able to see a 5.7% increase in their employment rate five years following the agreement.

The last configuration, titled *Legal Enforcement,* illustrates how communities with strong bargaining positions are able to capture value from their agreements with domestic firms at multiple stages of the project. Specifically, when communities are not proximate to the site yet have secured strong legal claims through impact benefit agreements with domestic firms, they are able to capture employment value within high value-creation phases (configuration 4a). If communities also possess strong property rights afforded through modern land claims or treaties, coupled with an IBA, they are able to capture value irrespective of the value-creation phase of the mine (Configuration 4b). Although this is the least common pathway (raw coverage= 0.031), it is the only configuration that allows for value capture throughout the various value creation phases. An example of this pathway is the community of Lac Seul First Nation, a community with a historic treaty and modern legislation that has accepted additional governance responsibilities that have been conceded by the Canadian federal government. Lac Seul also signed an impact benefits agreement with Goldcorp Inc, a Canadian-based mining company, to secure "future employment and contracting opportunities for the two Anishinaabe communities and provide for future education and training initiatives" (Northern Ontario Business Staff, 2019).

While these four configurations are not in direct conflict with one another, it does illustrate the similar yet unique challenges communities face when maintaining their realized value capture across time. Specifically, employment value capture nearly always required the absence of a high employment rate, which intuitively makes sense as we were measuring employment as a percentage of the total population; however, it reaffirms the marginal utility of value, such that one additional unit becomes easier/harder to achieve dependent on initial resource stocks. In addition,

communities with minimal or reduced bargaining power may be able to capture value in the early stages by (1) being a first mover and leveraging knowledge gaps and existing slack resources, (2) leveraging complementary resources in terms of access through urban centers, or (3) pushing out competitors through strong legal claims or close physical presence to the site, although this capture is limited to low-value creation phases of mining projects. In contrast, value capture in high-creation phases is limited to those community stakeholders with strong bargaining power and legal agreements with domestic firms, illustrating the intentional and competitive strategies stakeholders may deploy at different times.

Employment Rate Growth ~Y Analysis

We then conduct an ~Y (absence of the outcome) analysis to better understand configurations that lead to *not* high employment rate growth, in which we find one main theoretical configuration with three variations (Configurations 5a-5c). Collectively, these configurations reflect the inverse of our third configuration (limited competition) and present contexts in which community stakeholders lack many of the resources needed to be competitive. Specifically, these community stakeholders lack formal bargaining power without a formal claim to value capture elements or clearly defined property rights (configurations 5b and 5c). Further, these communities lack complimentary resources, as their employment resources are fully utilized, and they lack access to urban (configurations 5a and 5c) or site (configurations 5a and 5b) locations. The struggle to capture value is amplified by the presence of a high-value creation phase when we see value capture outcomes more difficult to achieve. Lastly, communities are unable to extract any additional rents from knowledge asymmetries as they engage with domestic firms. Therefore, the only recipe for not experiencing employment value capture is the *simultaneous* absence of

bargaining power (limited contractual value capture and absence of property rights) and complementary resources (limited physical access and exhausted labour resources).

Community Value Capture: Individual Income

Next, we analyze the effects on individual incomes (see Table 8) and identify three unique configurations which consistently explain much of the variation we see within the sample (solution consistency = 0.959, solution coverage = 0.882). Again, these configurations reflect variation in community stakeholder bargaining power positions and contexts, illustrating the multiple ways communities capture economic value.

Table 8: Individual Income Rate Growth Configuration Table

	High Individual Income Growth						**Not High Income**
Bargaining Power	Low BP			Partial BP		High BP	-
	Spill Over Effects		National Comradery	Asserted Sovereignty		Legally Asserted Capture	-
Configuration	**6a**	**6b**	**7**	**8a**	**8b**	**9**	-
Bargaining Power							-
Strong Contractual Value Capture						●	-
Community Governance				●	●		-
Initial Resources							-
High Individual Income			⊗	⊗	⊗	⊗	-
Ease of Access							-
Urban	⊗	⊗			⊗	⊗	-
Close to Site	⊗	⊗		⊗			-
Value Creation Phase							-
High Value Creation Phase		•					-
Knowledge Equality							-
Domestic Ownership	⊗		●				-
Raw Coverage	0.157	0.289	0.651	0.244	0.370	0.155	-
Unique Coverage	0.043	0.018	0.314	0.004	0.012	0.035	-
Consistency	0.997	0.955	0.958	0.995	0.982	0.980	-
Overall Solution Coverage	0.882						-
Overall Solution Consistency	0.959						-

The first configuration, labelled *Spill-Over Effects,* is a pathway in which communities gain spill-over value capture from the project despite their lower bargaining power and complementary resources. Although these communities are physically located outside an urban center and removed from the project site, they are partnered with a foreign firm (configuration 6a)

or benefit from the high value creation phase (configuration 6b). For example, the Deninu Kųę First Nation is a rural community in northern Canada, located 400km from the Diavik diamond mine, and was excluded from the Impact Benefit Agreement signed with their neighbouring communities (CBC News, 2016). Despite this, Deninu Kųę First Nation appears to have successfully captured spill-over effects as evidenced by their increase of nearly $15,000 in median individual income within the five-year period, comparable to neighbouring communities who signed a CBA.

The second configuration, labelled *National Comradery,* illustrates the situation in which domestic firms invest and prioritize local Indigenous communities who had lower initial individual income levels. This configuration has the highest unique coverage (0.314), suggesting that income value capture is most often influenced by the firm's home country, whereby communities can utilize patriotic comradery or societal expectations of firms as a resource to capture value. An exemplar case of this pathway is Hatchet Lake Denesuline Nation, and the Canadian-owned Millenium Project based in Saskatchewan. Hatchet Lake Denesuline Nation initially had lower individual income, and despite the lack of a strong bargaining power position (absence of a modern treaty or IBA) or lack of proximity to the site or urban centers, individual median income nearly doubled during this 5-year period.

The third configuration, labelled *Asserted Sovereignty,* emphasizes the strong effects of having clear property rights granted through a modern treaty when coupled with lower initial individual income levels. Regardless of whether these conditions are coupled with distance from the project site (configuration 8aa) or an urban center (configuration 8b), communities experience an increase in individual income levels. Collectively, this configuration illustrates how property rights and self-government are effective in capturing income value in local communities. For

example, Lac La Ronge First Nation, a signatory to a historical treaty and modern governance legislation, is a rural community with an initially lower individual income rate. The nation is located nearly 200km from the project site yet was able to nearly double its individual median income during this time, with no legal claim to additional employment or royalties opportunities.

The last configuration, titled *Legal Enforcement,* illustrates how communities with stronger bargaining positions are able to capture income value from their agreements with firms. Specifically, when communities possess a strong legal claim to value and are distant from urban centers and have lower initial income levels, they are able to experience high income growth. Although this is the least common pathway (raw coverage= 0.155) to value capture, it is surprisingly the most strongly emphasized pathway for communities in both academic and social narratives. Specifically, there are numerous articles aimed at exploring the numerous characteristics and terms needed to achieve better agreement outcomes (Cascadden et al., 2021; C. Gunton et al., 2021), with Indigenous communities even taking legal action against a firm when not offered an agreement, as they believed they had "[lost] out on the jobs and business opportunities IBAs bring" (CBC News, 2016). Despite the infrequent coverage of this pathway, an exemplary case is Wagmatcook First Nation, which signed an Impact Benefit Agreement that included royalty payments for the nation (MacDonald, 2016), and the community was able to increase their individual income by over $15,000 during this time.

Collectively, these four simple configurations reflect the importance of context and complementary resources in capturing individual income growth. Specifically, community stakeholders with limited bargaining power can still capture added value through either capturing spill-over effects from neighbouring communities or using national comradery or societal pressures to capture additional value. However, when communities have stronger bargaining

power positions, the effects of physical place and access to urban centres or the project site are lower, and instead, the role of initial resources is more salient. Despite a stakeholder's initial bargaining power, there are pathways for increasing individual incomes across all value-creation phases, illustrating a general ease in capturing income value from extractive projects.

Individual Income Growth ~Y Analysis

We conducted a ~Y (absence of the outcome) analysis to identify configurations that lead to *not* high individual income growth and found no configurations within our parameters. Specifically, we required that cases within the truth table have a consistency greater than 0.7 (Pappas & Woodside, 2021); yet no cases within the analysis met this threshold. This provides evidence of the causal asymmetry within the model (Fiss, 2007; Greckhamer et al., 2018), illustrating how the conditions that lead to the outcome may be different than the conditions that lead to the absence of the outcome. Therefore, this finding is not concerning, but rather suggests that value capture is causally asymmetric, such that the conditions that lead to the absence of value capture are different than the conditions that lead to value capture.

DISCUSSION

Value-based strategy has adopted a narrow focus on understanding how specific stakeholders capture limited types of value within the context of market transactions (Coff, 1999) and supply chain stakeholders (Barney, 2018). The aim of this study has been to extend our understanding of value-capture processes to explore value-capture strategies of local community stakeholders. Specifically, we investigate the research question of *how contextual and stakeholder-specific characteristics enable community stakeholder value capture outcomes*, thereby contributing to

filling the need for more robust empirical measurement of value capture (Barney, 2020; Garcia-Castro & Aguilera, 2015) and identification of the determinants of stakeholders' value appropriation (Ramírez & Tarziján, 2018). By studying economic value capture outcomes within Indigenous communities proximate to resource extraction projects in Canada, it is clear that these community stakeholders were residual claimants. Within this context, we explore the causes for high economic value capture (employment and income growth) and identify four configurations for each outcome.

Our analysis and identified configurations offer several interesting insights. First, irrespective of the type of economic value capture, communities aiming to achieve higher capture outcomes could do so with varying levels of bargaining power. At lower levels of bargaining power, communities strategically position themselves by being a *first mover* (configuration 1), capturing *spill-over effects* (configuration 6a and 6b), or relying on societal expectations and goodwill (configuration 7), suggesting that bargaining power may be helpful, but not necessary in capturing value. Second, employment growth outcomes were noticeably more complex, requiring a larger number of sufficient conditions (4-6 conditions), while income growth configurations were simpler (2-3 configurations). The variation in the complexity of these configurations may suggest that the *ease* of capturing value may vary according to the different types of value, with some dimensions being easier (or harder) to capture, irrespective of a stakeholder's bargaining power. Similar to knowledge acquisition (Cohen & Levinthal, 1990; Jansen, Van den Bosch, & Volberda, 2005), elements of value may be easier/harder to internalize based on the ambiguity and complexity of required preceding conditions. For example, capturing economic value in the form of tax revenues or revenue sharing requires few preceding conditions, such as internal financial capabilities or infrastructure such as bank accounts, and auditing capabilities (C. Gunton et al.,

2021), and the process of internalizing these elements may be well understood. In contrast, capturing employment outcomes requires several complex preceding conditions, and the process of internalizing these benefits may be ambiguous and require adaptation based on the specific community's circumstances. For example, to increase employment rates, communities will need to possess a sufficient labour supply, members with adequate training and qualifications, and members motivated and interested in these positions; failure in any area of these conditions may limit a community's ability to capture these benefits. In addition, a clear process to achieve higher employment does not exist; rather, numerous elements must be adapted to the specific context and needs of the local community (Immergluck, 1998). Third, despite this difference in complexity, we find that the configurations identified for employment growth outcomes overlap those for individual income outcomes. Importantly, we find that configurations identified for high employment growth are often a subset of the configurations for individual income growth, meaning that communities that reflect a high employment growth configuration, will often also reflect a configuration for high income growth (e.g., configuration 1 is a subset of configuration 6a). In contrast, communities that achieve high income may not necessarily contain all the sufficient conditions to also capture employment. Lastly, communities can only capture employment value in high value creation phases if they also have a strong bargaining power position, suggesting that the amount of value being created may influence competitive pressures within the stakeholder nexus, making value capture more difficult. In this case, projects in a lower value creation phase (e.g., feasibility) reflect relatively lower stakeholder competition, allowing lower bargaining power communities to also capture some of this value. In contrast, when projects transition to higher value creation phases (e.g., production), competition among community stakeholders increases. This may occur as mine production often requires the sourcing of long-

distance commuting (LDC) workforces, as there is a "limited availability of suitably skilled labour in remote and regional areas" (McKenzie, Haslam McKenzie, & Hoath, 2014), creating a scarcity of jobs for local workers. This scarcity of resources may be what increases competition among community stakeholders, with a strong bargaining power determining value distribution. Surprisingly, this effect is not replicated within income value capture, as growth appears to be minimally influenced by the value creation phases. In contrast to employment, capturing income growth may be reflective of economic spillovers beyond that of higher-paying employment, such as general local economic growth from local purchasing and accommodations for project personnel (Haslam McKenzie & Hoath, 2014). From this perspective, growth in income is not necessarily a fixed-sum game, but rather allows for synergies across stakeholder groups. Lastly, we find evidence of causal ambiguity of value-capture outcomes, such that the absence of employment/income growth (~Y) cannot be fully explained using the conditions that lead to the employment/income growth and therefore, may require the consideration of additional conditions (Fiss, 2007).

In light of these findings, this study complements and advances previous research in several ways. First, this study contributes to our understanding of value-based strategy by enriching our empirical measurement and understanding of the mechanisms associated with community stakeholder value capture. Empirical measurement has been an Achilles heel for VBS theorizing, as "measures of total value creation have gone almost completely unrecognized in strategic management, and tools for assessing value capture by multiple stakeholders remain rudimentary and ad hoc" (Lieberman et al., 2018, p. 1550). Our measurement of community value capture compliments the foundational work of Lieberman et al. (2017, 2018) by offering an empirical measurement that accounts for opportunity costs (Coff, 1999) for an undertheorized and

empirically unexplored type of stakeholder (Arenas et al., 2020; Barney, 2018; Dunham et al., 2006). This development of a community stakeholder measurement of economic value capture enriches our measurement of type two performance, or performance that reflects "the level of each of the individuals and organizations who make profit-generating resources available to a firm" (Barney, 2020, p. 6). This measure could be further developed to be inclusive of holistic forms of community stakeholder value capture, such as social (Cabral et al., 2019), cultural (Dacin et al., 2010), and environmental (Murphy, Danis, Mack, & Sayers, 2020) forms of value.

Second, this study enhances our understanding of the determinants of stakeholder value capture by complimenting existing explanations based on bargaining power with newer theoretical developments in the form of complimentary resources and institutional context (Ramírez & Tarziján, 2018). Specifically, we find that while a strong bargaining power position is beneficial in improving stakeholder value capture outcomes, on its own, it is not necessary or sufficient to achieve economic value capture. Instead, the ways in which stakeholders leverage and combine their existing resources (one of which may be their bargaining power) to capture value are more predictive of value capture outcomes. One of the unique resources our study uncovers emerges from the institutional context, in which stakeholders can capitalize on the firm's host country in different ways. Specifically, when communities engage with domestic firms, they are able to leverage institutional resources stemming from national camaraderie or societal expectations, while leveraging knowledge gaps with foreign firms. While previous research has explored how certain institutional policies may enable higher value capture for certain stakeholders (Ramírez & Tarziján, 2018), our work extends this to illustrate how stakeholders may also leverage institutional norms, and familiarity with these norms, to enable higher value capture outcomes.

Relatedly, our study supports and expands upon prior research, which found that Indigenous communities with strong property rights were more likely to increase their bargaining power through the formalization of a value claim through an IBA (Odziemkowska & Dorobantu, 2021). Our results suggest that while bargaining power may be helpful in securing a contractual claim on value created (*potential value capture),* as found by Odziemkowska and Dorobantu (2021), it is not directly related to the value captured by the stakeholder (*realized value capture),* empirically reflecting a gap between these two concepts [ES – dissertation theory paper].

Lastly, our study contributes to the literature on the effectiveness of contractual stakeholder governance strategies, specifically community benefit agreements. As prior research has found that the relationships between extractive companies and Indigenous Peoples have gradually begun to shift from adversarial in nature to more collaborative (Salmon et al., 2023), community collaboration and formal agreements have been a primary mechanism to ensure local communities can share in the benefits derived from development projects in their territory (Arenas et al., 2020; Odziemkowska & Dorobantu, 2021). While contractual governance appears to be a beneficial strategy, others have identified unique cases in which these agreements failed to achieve desired outcomes (Adebayo & Werker, 2021; T. Gunton et al., 2021), lending some to question the overall effectiveness of the governance mechanism (Been, 2010; Caine & Krogman, 2010). While our analysis does not evaluate variation in the material benefits secured within individual agreements, our findings suggest that the effectiveness of stakeholder governance strategies is not solely influenced by the specific terms of the agreement, but also by the individual community's current resource stocks and contextual considerations. From this perspective, it becomes plausible for neighbouring communities to have drastically different outcomes following an agreement, and based on a community's individual positioning, they may be better off pursuing other strategies to

share in the benefits gained through local resource development. For example, if a community aims to improve local individual income following a project, they may be equally positioned to benefit by possessing a formal agreement (configuration 9) as they would when possessing strong property rights (configuration 8b).

LIMITATIONS

Two caveats of this study should be pointed out. First, we empirically focus on the specific context of Indigenous communities and mining projects, which ensures that the community stakeholders are residual claimants to nexus rents (Barney, 2018). However, it is important to acknowledge the effects of the unique institutional context in which this study is embedded. First, Indigenous communities in Canada hold specific rights and recognition stemming from national (Kulchyski, 2013) and international (Barelli, 2012; Murphy & Arenas, 2010) legislation that enshrines their rights to consultation and consent in regard to activities impacting their traditional territory or cultural practices. These legislated rights can, therefore, prompt additional consultation and attention from extractive firms compared to other stakeholder groups, such as local municipalities. Second, within broader Canadian society, there is a growing awareness and recognition of Indigenous rights and the responsibility of governments and firms to uphold these rights, which may not reflect the socio-political climate in other countries (Lightfoot, 2010). Therefore, our findings may not be directly transferable to other types of community stakeholders (Georgiou & Arenas, 2023) or Indigenous communities in other countries with more adversarial relationships (Schilling-Vacaflor, Flemmer, & Hujber, 2018).

Second, our empirical analysis focuses on a limited type of value capture, predominantly economic capture of employment and income. However, stakeholders create and capture various

forms of value, including social or ecological value (Freudenreich et al., 2020), which are also important to stakeholders (Harrison & Wicks, 2013). While there is little empirical research on the determinants of social value capture, its creation/capture can be different than traditional economic value (Cabral et al., 2019). Therefore, our results cannot be directly applied to understanding the capture of non-economic forms of value. In addition, our study was primarily interested in better understanding the conditions that led to successful value capture, omitting the exploration of value destruction. While our results empirically acknowledge cases of value destruction, community stakeholders that capture *less* value than their next best alternative (lower than their opportunity cost), we do not theorize the determinants and mechanisms leading to cases of value destruction or reasons why stakeholders remain entangled in these nexuses. Lastly, these indicators reflect economic value within *Western economies,* thereby omitting growth and activities within traditional economies. Therefore, it is important to acknowledge that communities continue to cultivate thriving economies that exist in parallel to mainstream economies, and that our analysis is limited to understanding and explaining changes within mainstream economies.

In light of these limitations, there are several ways future research could expand on this study. First, future research should test the robustness of these findings by empirically exploring how contextual characteristics and complimentary resources can influence economic value capture outcomes of other stakeholder groups (e.g., employees, suppliers). A better understanding of stakeholders' unique pathways to economic value capture would provide further clarity on the theoretical role of contextual characteristics and complementary resources within our broader understanding of value capture strategy. Second, we hope that future research will expand on this study to further consider the mechanisms underlying social and ecological value capture and how they theoretically align or differ from the determinants of economic value capture. This can be

empirically challenging, as collecting large samples of community-level data on social indicators (e.g., health, social cohesion) or ecological indicators (e.g., natural capital) across longer periods of time can be extremely difficult. Despite these challenges, stakeholders contribute to the creation and capture of various types of social value (Kroeger & Weber, 2014), and further theoretical and empirical development is needed to better understand these individual value capture processes (Cabral et al., 2019) and how stakeholders may holistically perceive value capture across multiple dimensions. Lastly, the causal asymmetry illustrated within our findings suggests that further research is needed to theorize and empirically test the determinants of value destruction. Currently, the concept of value destruction is overlooked within the literature, yet it is crucial that we gain further conceptual clarity and theoretical understanding to better understand when and why stakeholders may be harmed by their interaction with the nexus and how they navigate this relationship.

CONCLUSION

Strategic Management scholars are being called upon to reconsider their measurement of firm performance, as firm-centric measurements reflect a small portion of the value created and subsequently captured by other stakeholders (Barney, 2018, 2020). While stakeholder value capture is predominantly predicted by a stakeholder's bargaining power (Coff, 1999; Stoelhorst, 2021), alternative explanations of managerial overinvestment (Bosse et al., 2009), institutional contexts (Ramírez & Tarziján, 2018), and market characteristics (Molloy & Barney, 2015). Therefore, using a unique dataset of Indigenous communities partnered with firms on resource development projects, we use fsQCA to uncover the determinants of economic value capture for these community stakeholders. We find that bargaining power is not necessary or sufficient to

capture value, but rather, it is the unique combinations of bargaining power, complementary resources, and contextual characteristics that lead to positive employment and income value capture.

REFERENCES

Adebayo, E., & Werker, E. (2021). How much are benefit-sharing agreements worth to communities affected by mining? Resources Policy, 71, 101970.

Alcantara, C. (2007). To Treaty or Not to Treaty? Aboriginal Peoples and Comprehensive Land Claims Negotiations in Canada1. Publius: The Journal of Federalism, 38(2), 343-369.

Aragon, F. M. (2015). Do better property rights improve local income?: Evidence from First Nations' treaties. Journal of Development Economics, 116, 43-56.

Aragon, F. M., & Kessler, A. S. (2020). Property rights on First Nations reserve land. Canadian Journal of Economics-Revue Canadienne D Economique, 53(2), 460-495.

Arenas, D., Murphy, M., & Jáuregui, K. (2020). Community Influence Capacity on Firms: Lessons from the Peruvian Highlands. Organization Studies, 0170840618814567.

Barelli, M. (2012). Free, prior and informed consent in the aftermath of the UN Declaration on the Rights of Indigenous Peoples: developments and challenges ahead. The International Journal of Human Rights, 16(1), 1-24.

Barney, J. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. Strategic Management Journal, 39(13), 3305-3325.

Barney, J. (2020). Measuring Firm Performance in a Way that Is Consistent with Strategic Management Theory. Academy of Management Discoveries, 6(1), 5-7.

Been, V. (2010). Community Benefits Agreements: A New Local Government Tool or Another Variation on the Exactions Theme? The University of Chicago Law Review, 77(1), 5-35.

Bosse, D. A., Phillips, R. A., & Harrison, J. S. (2009). Stakeholders, reciprocity, and firm performance. Strategic Management Journal, 30(4), 447-456.

Brandenburger, A. M., & Stuart, H. (1996). Value-based business strategy. Journal of Economics & Management Strategy, 5(1), 5-24.

Bridoux, F., & Stoelhorst, J. W. (2014). Microfoundations for Stakeholder Theory: Managing Stakeholders with Heterogeneous Motives. Strategic Management Journal, 35(1), 107-125.

Cabral, S., Mahoney, J. T., McGahan, A. M., & Potoski, M. (2019). Value creation and value appropriation in public and nonprofit organizations. Strategic Management Journal, 40(4), 465-475.

Caine, K. J., & Krogman, N. (2010). Powerful or just plain power-full? A power analysis of impact and benefit agreements in Canada's north. Organization & Environment, 23(1), 76-98.

Call, M. L., & Ployhart, R., E. (2021). A Theory of Firm Value Capture from Employee Job Performance: A Multi-Disciplinary Perspective. Academy of Management Review.

Cascadden, M., Gunton, T., & Rutherford, M. (2021). Best practices for Impact Benefit Agreements. Resources Policy, 70, 101921.

CBC News. (2016). Deninu Kue First Nation takes fight for benefits to new Indigenous Affairs minister. 2023(Oct 17). Retrieved from https://www.cbc.ca/news/canada/north/deninu-kue-diamond-mine-ibas-1.3409567

Clements, K. W., Ahammad, H., & Qiang, Y. (1996). New mining and mineral-processing projects in Western Australia: Effects of employment and the macro-economy. Resources Policy, 22(4), 293-346.

Coff, R. W. (1999). When Competitive Advantage Doesn't Lead to Performance: The Resource-Based View and Stakeholder Bargaining Power. Organization science, 10(2), 119-133.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128-152.

Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social Entrepreneurship: Why We Don't Need a New Theory and How We Move Forward From Here. Academy of Management Perspectives, 24(3), 37-57.

Darling, S., Harvey, B., & Hickey, G. M. (2023). From ‘stakeholders’ to rights holders: How approaches to impact assessment affect indigenous participation in the Yukon Territory, Canada. Environmental Impact Assessment Review, 99, 107025.

de Block, D., & Vis, B. (2019). Addressing the Challenges Related to Transforming Qualitative Into Quantitative Data in Qualitative Comparative Analysis. Journal of Mixed Methods Research, 13(4), 503-535.

De Crescenzo, V., Ribeiro-Soriano, D. E., & Covin, J. G. (2020). Exploring the viability of equity crowdfunding as a fundraising instrument: A configurational analysis of contingency factors that lead to crowdfunding success and failure. Journal of Business Research, 115, 348-356.

De Stefano, F., Bidwell, M., & Camuffo, A. (2022). Do managers capture the value they create? Drivers of managers' value capture in a large retail chain. Strategic Management Journal, 43(10), 1983-2011.

Dorobantu, S., & Odziemkowska, K. (2017). Valuing Stakeholder Governance: Property Rights, Community Mobilization, and Firm Value. Strategic Management Journal, 38(13), 2682-2703.

Doty, D. H., Glick, W. H., & Huber, G. P. (1993). Fit, Equifinality, and Organizational Effectiveness: A Test of Two Configurational Theories. Academy of Management Journal, 36(6), 1196-1250.

Dul, J. (2016). Necessary Condition Analysis (NCA):Logic and Methodology of “Necessary but Not Sufficient” Causality. Organizational Research Methods, 19(1), 10-52.

Dunham, L., Freeman, R., & Liedtka, J. (2006). Enhancing stakeholder practice: a particularized exploration of community. Business Ethics Quarterly, 16(1), 23-42.

Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. Academy of Management Review, 32(4), 1180-1198.

Fiss, P. C. (2011). Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. Academy of Management Journal, 54(2), 393-420.

FNIGC. (2014). Ownership, Control, Access and Possession (OCAP™): The path to First Nations information governance. Retrieved from http://fnigc.ca/sites/default/files/docs/ocap_path_to_fn_information_governance_en_final.pdf

Forster, M. E., Palmer, F., & Barnett, S. (2016). Karanga mai ra: Stories of Maori women as leaders. Leadership, 12(3), 324-345.

Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2020). A Stakeholder Theory Perspective on Business Models: Value Creation for Sustainability. Journal of Business Ethics, 166(1), 3-18.

Gans, J., & Ryall, M. D. (2017). Value capture theory: A strategic management review. Strategic Management Journal, 38(1), 17-41.

Garcia-Castro, R., & Aguilera, R. V. (2015). Incremental value creation and appropriation in a world with multiple stakeholders. Strategic Management Journal, 36(1), 137-147.

Georgiou, A., & Arenas, D. (2023). Community in Organizational Research: A Review and an Institutional Logics Perspective. Organization Theory, 4(1), 26317877231153189.

Gilbert, J., & Lennox, C. (2020). Towards new development paradigms: the United Nations Declaration on the Rights of Indigenous Peoples as a tool to support self-determined development. In The United Nations Declaration on the Rights of Indigenous Peoples (pp. 103-123): Routledge.

Greckhamer, T. (2016). CEO compensation in relation to worker compensation across countries: The configurational impact of country-level institutions: CEO Compensation in Relation to Worker Compensation Across Countries. Strategic Management Journal, 37(4), 793-815.

Greckhamer, T., Furnari, S., Fiss, P. C., & Aguilera, R. V. (2018). Studying configurations with qualitative comparative analysis: Best practices in strategy and organization research. Strategic Organization, 16(4), 482-495.

Greckhamer, T., & Gur, F. A. (2021). Disentangling combinations and contingencies of generic strategies: A set-theoretic configurational approach. Long Range Planning, 54(2), 101951.

Gunton, C., Gunton, T., Batson, J., Markey, S., & Dale, D. (2021). Designing fiscal regimes for impact benefit agreements. Resources Policy, 72, 102004.

Gunton, T., Werker, E., & Markey, S. (2021). Community benefit agreements and natural resource development: Achieving better outcomes. Resources Policy, 73, 102155.

Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. Strategic Management Journal, 31(1), 58-74.

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder Theory, Value, and Firm Performance. Business Ethics Quarterly, 23(1), 97-124.

Haslam McKenzie, F. M., & Hoath, A. (2014). The socio-economic impact of mine industry commuting labour force on source communities. Resources Policy, 42, 45-52.

Herrmann, A. M., & Cronqvist, L. (2009). When dichotomisation becomes a problem for the analysis of middle-sized datasets. International Journal of Social Research Methodology, 12(1), 33-50.

Immergluck, D. (1998). Job Proximity and the Urban Employment Problem: Do Suitable Nearby Jobs Improve Neighbourhood Employment Rates? Urban Studies, 35(1), 7-23.

Jansen, J. J. P., Van den Bosch, F. A. J., & Volberda, H. W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedent's matter? Academy of Management Journal, 48(6), 999-1015.

Kovach, M. (2010). Indigenous methodologies: Characteristics, conversations, and contexts: University of Toronto Press.

Kraus, S., Ribeiro-Soriano, D., & Schüssler, M. (2018). Fuzzy-set qualitative comparative analysis (fsQCA) in entrepreneurship and innovation research – the rise of a method. International Entrepreneurship and Management Journal, 14(1), 15-33.

Kroeger, A., & Weber, C. (2014). Developing a Conceptual Framework for Comparing Social Value Creation. Academy of Management Review, 39(4), 513-540.

Kukutai, T., & Taylor, J. (2016). Data sovereignty for indigenous peoples: current practice and future needs. In Indigenous data sovereignty: Toward an agenda: ANU Press.

Kulchyski, P. (2013). Aboriginal rights are not human rights. defence of indigenous struggles. Winnipeg, Manitoba, Canada: ARP Books.

Lieberman, M. B., Balasubramanian, N., & Garcia-Castro, R. (2018). Toward a dynamic notion of value creation and appropriation in firms: The concept and measurement of economic gain. Strategic Management Journal, 39(6), 1546-1572.

Lieberman, M. B., Garcia-Castro, R., & Balasubramanian, N. (2017). Measuring value creation and appropriation in firms: The VCA model. Strategic Management Journal, 38(6), 1193-1211.
Lightfoot, S. R. (2010). Emerging international indigenous rights norms and 'over-compliance' in New Zealand and Canada. Political Science, 62(1), 84-104.
MacDonald, P. (2016). Mi'kmaq chiefs sign 'historic' deal with Kameron Coal over Donkin mine. Retrieved from https://www.cbc.ca/news/canada/nova-scotia/assembly-mi-kmaq-chiefs-donkin-royalty-coal-kameron-terry-paul-1.3622464
McKenzie, F., Haslam McKenzie, F., & Hoath, A. (2014). Fly-In/Fly-Out, Flexibility and the Future: Does Becoming a Regional FIFO Source Community Present Opportunity or Burden? Geographical Research, 52(4), 430-441.
Meyer, A. D., Tsui, A. S., & Hinings, C. R. (1993). Configurational Approaches to Organizational Analysis. Academy of Management Journal, 36(6), 1175-1195.
Miller, D. (1996). Configurations Revisited. Strategic Management Journal, 17(7), 505-512.
Molloy, J. C., & Barney, J. (2015). Who Captures the Value Created with Human Capital? A Market-Based View. Academy of Management Perspectives, 29(3), 309-325.
Murphy, M., & Arenas, D. (2010). Through Indigenous Lenses: Cross-Sector Collaborations with Fringe Stakeholders. Journal of Business Ethics, 94, 103-121.
Murphy, M., Danis, W. M., Mack, J., & Sayers, J. (2020). From principles to action: Community-based entrepreneurship in the Toquaht Nation. Journal of Business Venturing, 35(6), 106051.
Northern Ontario Business Staff. (2019). Red Lake mine developer sharing the wealth with First Nations. Retrieved from https://www.northernontariobusiness.com/industry-news/mining/red-lake-mine-developer-sharing-the-wealth-with-first-nations-1612367
O'Faircheallaigh, C. (2013). Community development agreements in the mining industry: an emerging global phenomenon. Community Development, 44(2), 222-238.
O'Faircheallaigh, C. (2021). Explaining outcomes from negotiated agreements in Australia and Canada. Resources Policy, 70, 101922.
Odziemkowska, K., & Dorobantu, S. (2021). Contracting Beyond the Market. Organization science, 32:3, 776-803.
Pappas, I. O., & Woodside, A. G. (2021). Fuzzy-set Qualitative Comparative Analysis (fsQCA): Guidelines for research practice in Information Systems and marketing. International Journal of Information Management, 58, 102310.
Peteraf, M., & Barney, J. (2003). Unraveling the resource-based tangle. Managerial and Decision Economics, 24(4), 309-323.
Petersen, B., Pedersen, T., & Lyles, M. A. (2008). Closing knowledge gaps in foreign markets. Journal of International Business Studies, 39(7), 1097-1113.
Phillips, R., Freeman, R., & Wicks, A. C. (2003). What stakeholder theory is not. Business Ethics Quarterly, 13(4), 479-502.
Pomart, P. N. (2020). Reframing Indigenous Peoples from Stakeholders to Rightsholders. Academy of Management Proceedings, 2020(1), 20874.
Price, S. T., & Hartt, C. M. (2023). A story-net approach to qualitative research: having tea with stories! Qualitative Research in Organizations and Management: An International Journal, 18(3), 222-244.
Quinless, J. (2021). Decolonizing Data: Unsettling Conversations about Social Research Methods: University of Toronto Press.

Ragin, C. C. (2000). Fuzzy-set social science. Chicago: University of Chicago Press.
Ragin, C. C. (2008). Redesigning social inquiry : fuzzy sets and beyond. Chicago: University of Chicago Press.
Ragin, C. C. (2023). Research Note: Stepwise Consistency Analysis. Retrieved from https://compasss.org/wp-content/uploads/2023/08/Stepwise.pdf
Ramírez, C., & Tarziján, J. (2018). Stakeholder value appropriation: The case of labor in the worldwide mining industry. Strategic Management Journal, 39(5), 1496-1525.
Ryall, M. D. (2013). The new dynamics of competition. Harvard Business Review, 91(6), 80-87.
Salmon, E., Chavez, J. F., & Murphy, M. (2023). New Perspectives and Critical Insights from Indigenous Peoples' Research: A Systematic Review of Indigenous Management and Organization Literature. Academy of Management Annals.
Schilling-Vacaflor, A., Flemmer, R., & Hujber, A. (2018). Contesting the hydrocarbon frontiers: State depoliticizing practices and local responses in Peru. World Development, 108, 74-85.
Schnarch, B. (2004). Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities. International Journal of Indigenous Health, 1(1), 80-95.
Smith, L. T. (1999). Decolonizing methodologies: Research and indigenous peoples: Zed Books Ltd.
Statistics Canada. (2016). Dictionary, Census of Population, 2016. Ottawa: Ontario.
Stoelhorst, J. W. (2021). Value, rent, and profit: A stakeholder resource-based theory. Strategic Management Journal, 1-26.
Subedi, R., Roshanafshar, S., & Greenberg, T. L. (2020). Developing meaningful categories for distinguishing levels of remoteness in Canada. Retrieved from https://www150.statcan.gc.ca/n1/pub/11-633-x/11-633-x2020002-eng.htm
Szoke-Burke, S., & Werker, E. (2021). Benefit sharing, power, and the performance of multi-stakeholder institutions at Ghana's Ahafo mine. Resources Policy, 71, 101969.
Tantalo, C., & Priem, R. L. (2016). Value Creation through Stakeholder Synergy. Strategic Management Journal, 37(2), 314-329.
Tiryakian, E. A. (1968). Typologies. In D. Sills & R. Merton (Eds.), International encyclopedia of the social sciences (Vol. 16, pp. 177-186). New York: Macmillan.
Walter, M., & Andersen, C. (2016). Indigenous statistics: A quantitative research methodology: Routledge.
Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. Journal of Business Research, 66(4), 463-472.
Zaheer, S. (1995). Overcoming the liability of foreignness. Academy of Management Journal, 38(2), 341-363.

Archibald, J., Lee-Morgan, J. B. J., & De Santolo, J. 2019. ***Decolonizing Research: Indigenous Storywork as Methodology***: Bloomsbury Publishing.
Bacharach, S. B. 1989. Organizational Theories: Some Criteria for Evaluation. ***Academy of Management Review***, 14(4): 496-515.
Bullen, J., & Flavell, H. 2020. Measuring the'gift': Epistemological and ontological differences between the academy and Indigenous Australia, ***Academic Life in the Measured University***: 131-144: Routledge.

Ellis, J. B., & Earley, M. A. 2006. Reciprocity and Constructions of Informed Consent: Researching with Indigenous Populations. ***International Journal of Qualitative Methods***, 5(4): 1-13.

Gephart, R. 2004. Qualitative Research and the Academy of Management Journal. ***Academy of Management Journal***, 47(4): 454-462.

Gilbert, J., & Lennox, C. 2020. Towards new development paradigms: the United Nations Declaration on the Rights of Indigenous Peoples as a tool to support self-determined development, ***The United Nations Declaration on the Rights of Indigenous Peoples***: 103-123: Routledge.

Hanna, P., & Vanclay, F. 2013. Human rights, Indigenous peoples and the concept of Free, Prior and Informed Consent. ***Impact Assessment and Project Appraisal***, 31(2): 146-157.

Herrmann, T. M., Sandström, P., Granqvist, K., D'Astous, N., Vannar, J., Asselin, H., Saganash, N., Mameamskum, J., Guanish, G., Loon, J.-B., & Cuciurean, R. 2014. Effects of mining on reindeer/caribou populations and indigenous livelihoods: community-based monitoring by Sami reindeer herders in Sweden and First Nations in Canada. ***The Polar Journal***, 4(1): 28-51.

Kovach, M. 2010. ***Indigenous methodologies: Characteristics, conversations, and contexts***: University of Toronto Press.

Lertzman, D., & Vredenburg, H. 2005. Indigenous peoples, resource extraction and sustainable development: An ethical approach. ***Journal of Business Ethics***, 56(3): 239-254.

O'Faircheallaigh, C. 2013. Community development agreements in the mining industry: an emerging global phenomenon. ***Community Development***, 44(2): 222-238.

Quinless, J. 2021. ***Decolonizing Data: Unsettling Conversations about Social Research Methods***: University of Toronto Press.

Smith, L. 2021. ***Decolonizing Methodologies: Research and Indigenous Peoples*** (3rd ed.): Zed Books Ltd.

Smith, L. T. 1999. ***Decolonizing methodologies: Research and indigenous peoples***: Zed Books Ltd.

Söderholm, P., & Svahn, N. 2015. Mining, regional development and benefit-sharing in developed countries. ***Resources Policy***, 45: 78-91.

Sweet, V. 2013. Extracting more than resources: human security and Arctic indigenous women. ***Seattle UL Rev.***, 37: 1157.

Walter, M. 2010. The politics of the data: How the Australian statistical Indigene is constructed. ***International Journal of Critical Indigenous Studies***, 3(2): 45-56.

Walter, M., & Andersen, C. 2016. ***Indigenous statistics: A quantitative research methodology***: Routledge.

Walter, M., & Suina, M. 2019. Indigenous data, indigenous methodologies and indigenous data sovereignty. ***International Journal of Social Research Methodology***, 22(3): 233-243.