

Ph.D. Dissertation

Resume

Navigating Food Security and Market Reforms: The Role of Law, Trust, and Governance*

Christian Estmann

Faculty of Law
University of Copenhagen

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Advisors: John Rand & Morten Broberg

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1 Resume

The role of law in society is often perceived through the lens of formal institutions: parliaments enacting legislation, courts adjudicating disputes, and police enforcing rules. While valid, this perspective captures only a part of the broader function of law. Fuller (1969) defines law as “*the enterprise of subjecting human conduct to the governance of rules*”. This definition shifts the focus from the sources of law to its function—how it shapes and directs human behaviour (Hadfield 2017). Basu (2018) famously points out that, at its core, the law is merely “*ink on paper*”. This statement underscores the seemingly fragile nature of legal systems. Yet, despite its fragility, law wields significant power in society. Basu argues that the effectiveness of law hinges on the collective belief in its legitimacy and the expectation that others will comply. When individuals believe others will follow the law, it creates a self-reinforcing cycle where the expectation of compliance leads to actual compliance. In game theory, the law acts as a focal point (or Schelling point), which, by providing clear guidelines, assists in aligning individual actions towards mutually beneficial equilibria. “*The law works, to the extent that it does, by creating new focal points in the game of life or the economy game; and, further, this is the only way in which the law affects individual behaviour and collective outcomes*” (Basu 2018). When laws resonate with societal values and moral beliefs, compliance becomes a matter of personal integrity rather than just fear of punishment. However, many countries struggle with conflicting social norms, weak state capacity and a lack of state legitimacy, which may explain the lack of implementation in many nations. Studies have shown that formal laws do not receive the necessary acceptance, particularly in rural areas dominated by tight traditional communities (Connolly 2005; Schuppert 2009; Tamanaha 2014).

This PhD thesis explores the multifaceted role of law as a focal point in guiding human conduct and economic behaviour across various contexts. By examining the liberalisation of agricultural trade, the formulation of industrial policies, the fostering of cooperatives, the enhancement of contract preferences, and governance quality, this research aims to provide a comprehensive understanding of how market-economic regulations impact the most vulnerable populations. The project underscores the centrality of trust and collective expectations in effectively implementing legal frameworks.

1.1 Thesis summary

The first chapter of the PhD dissertation serves as a short introduction to the broader theme of food security explored throughout the thesis. It delves into the liberalisation of agricultural trade and its implications for food security. Liberalising agricultural trade is driven by the belief that open markets can enhance efficiency, promote competition, and ultimately improve food security (Van den Broeck et al. 2018). Removing trade restrictions is seen as a critical step towards integrating smallholder farmers into global markets, providing them greater access to market opportunities and potentially higher incomes (World Bank 2012).

The historical context traces the influence of agricultural policies from the post-war “food regime” shaped by US policies, leading to global market distortions. Many majority countries faced structural adjustment programs in the 1980s, pushing them towards market liberalisation while struggling against heavily subsidised agricultural sectors in developed countries. The inclusion of agriculture under GATT/WTO rules aimed to reduce such disparities but often favoured wealthier nations (Clapp 2015,0).

This chapter critically examines the transition from restrictive to open trade policies, focusing on how these changes influence market dynamics, farmer livelihoods, and food availability and utilisation. The discussion in this chapter is framed within the context of human rights law, particularly the right to food.

It emphasises the need for trade policies to be aligned with the state's obligation to ensure food security for its population. While trade liberalisation has the potential to drive economic growth and improve food security, it also poses risks, particularly for smallholder farmers who may lack the resources and capacity to compete in open markets. Furthermore, the chapter addresses the criticism that trade liberalisation can exacerbate inequalities and leave the poorest segments of the population more vulnerable to market shocks. By analysing empirical data from Tanzania, the chapter aims to capture the association between trade liberalisation and food security. The study uses data from Tanzania's National Panel Surveys and a difference-in-difference methodology, finding that lifting a maize export ban led farmers to shift to other crops, reducing their maize production and market engagement. This resulted in a borderline significant negative impact on household dietary diversity and quality, highlighting unintended consequences on food security. I argue that the ad hoc application of export restrictions in Tanzania has made the government unable to make a reliable focal point that can coordinate farmers' expectations and behaviours. The chapter underscores the need for balanced policies considering local agricultural contexts and trade-offs to support market efficiency and household food security. By setting the stage for the subsequent chapters, this short first chapter highlights the importance of creating legal and regulatory frameworks where the gains from trade support sustainable development and pro-poor growth.

In a world of trade liberalisation, **the second chapter** of the dissertation, co-authored with Bjørn Bo Sørensen, Benno Ndulu and John Rand, concurrently develop and apply a methodological framework for identifying attractive product industries that the government of Tanzania can target through industrial policies to support structural transformation, economic diversification, increased trade, and employment creation. As a form of regulatory measure, industrial policy aligns with the notion of law as a focal point by setting clear expectations and guidelines for foreign investors and entrepreneurs, guiding economic activities towards sustainable development and structural transformation. The chapter emphasises the state's role in promoting inclusive growth and diversifying the domestic supply chain to create globally competitive industries. This regulatory approach requires a nuanced understanding of the legal and economic environment, ensuring that policies are designed and implemented to maximise their impact. Targeting industries closely associated with Tanzania's current productive knowledge is crucial to ease the transition to a more complex economy.

The framework developed combines a supply-side analysis using the economic complexity methodology to identify target industries important for economic upgrading and diversification, with a demand-side analysis applying gravity models to rank the trade potential of these target products across different markets (Hidalgo and Hausmann 2009; Hidalgo et al. 2007). Economic complexity theory posits that a country's growth depends on its ability to produce diverse, complex industries, necessitating the accumulation of capabilities. The Product Space supply-side analysis is employed to identify industrial niches that introduce new productive knowledge and facilitate further diversification. Gravity models, which predict trade flows between countries based on their economic mass and distance, are used to identify industries with high demand-driven export potential. This approach enables Tanzania to target advantageous export markets and industries based on product-specific trade resistance and geographically dispersed demand. The supply-demand framework found that low-hanging fruits (industries close to Tanzania's existing know-how) are primarily within the agro-processing cluster. It also identified more complex industries with high diversification opportunities (long jumps), such as electrical machinery and chemicals. These industries require significant investment but offer substantial potential for structural transformation. The gravity model analysis reveals considerable potential for continuing regional trade integration within the East African Community (EAC) and the Southern African Development Community (SADC). Furthermore, the paper introduces a proxy for industry-specific labour intensity to rank

industries based on their potential to create jobs. This exercise finds a trade-off between industries' potential for increasing economic complexity and their potential to drive labour absorption, identifying agro-industry, construction, and textile industries. In essence, this paper serves as a methodological guide, showcasing instruments for policymakers to rank industries based on three different approaches, depending on policy priorities. While the final decision on priorities is left to policymakers, our findings consistently highlight the agro-processing industry across all three ranking methods. Therefore, a focus on agro-industry is recommended.

The third chapter follows a unique case study involving an agro-processing project in northern Tanzania, where a new cashew-processing factory is being built with shares gradually transferred to a local cooperative, making the cooperative and its members business partners in the agro-processing venture. This arrangement incentivises local farmers to join the cooperative, as they become shareholders in the processing facility, which processes their raw cashew nuts. The project is part of the DANIDA Market Development Partnership (DMDP) initiative, which aims to innovate the cashew nut value chain. The principal partners in the project include the Danish International Development Agency (DANIDA), CARE Tanzania, and Out-Growers Tanzania, which represent the private sector.

Historically, the cooperative sector in Tanzania has played a crucial role in providing market access for smallholder farmers. However, the cooperative movement faced significant challenges due to political interference and elite capture, leading to poor performance and a decline in crop output (Maghimbi et al. 2010). During the liberalisation processes in the 1990s, new cooperative laws were introduced to restore autonomy and voluntary participation. Despite these policy developments, the revival of the cooperative movement has stagnated, with ongoing issues of governance and trust continuing to hinder the effectiveness of cooperatives. Therefore, this study focuses on trust and collective action, elements argued to be the cornerstone of any republic. Chapter 3 argues that cooperatives' democratic and egalitarian structures can effectively promote trust and norms of reciprocity, ultimately contributing to societal transformation.

Trust in government correlates with laws being perceived as fair and just, which promotes voluntary compliance and reduces the need for coercive enforcement. This voluntary compliance is crucial because it lowers enforcement costs and enhances the efficiency of the legal system. When citizens trust that the government will enforce laws impartially, they are likelier to adhere to legal norms, fostering a stable and predictable legal environment conducive to economic growth and social stability (Tyler 1990; Zak and Knack 2001). On a social level, trust in others is crucial for the smooth functioning of society. Social trust underpins the willingness of individuals to engage in cooperative behaviours and participate in economic activities. When people believe that others will act ethically and honour their obligations, it reduces the need for extensive legal oversight and litigation, allowing for more efficient resolution of conflicts and fostering a sense of community and shared responsibility (Powell 1996). In essence, trust in both the government and fellow citizens creates a synergistic environment where the rule of law can flourish, leading to a more orderly, just, and prosperous society.

Chapter 3 is structured into two separate analyses; a short-term impact analysis of cooperative engagement and an internal identification-based trust analysis. The first phase of the chapter investigates how farmers' involvement in an agricultural cooperative society impacts short-term horizontal and vertical trust in a low-trust and low-income society. This analysis empirically explores the mobilisation of local farmers to engage in the cooperative movement due to the newly established partnership between the local cooperative and the private firm in agro-processing. The findings reveal only marginally signif-

ificant increases in members' social trust, potentially due to the short time span and limited exposure to the cooperative's shared values. However, individuals actively engaged in cooperative activities exhibit heightened general trust and trust towards fellow community members and farmers. This active involvement also correlates with enhanced community engagement and increased trust in local government institutions, which is vital for communal advancement. The second phase of the chapter focuses on understanding how members' attitudes impact their beliefs towards the cooperative, focusing on identification-based trust (Borgen 2001; Lewicki et al. 2006). Identification-based trust involves shared values and a sense of belonging, which are particularly relevant in cooperative settings where members internalise the organisation's values and norms. The chapter argues that identity is critical in understanding the formation of trust, referencing Hegel's notion of the struggle for recognition, which posits that individuals seek acknowledgement from others to affirm their social identity and self-worth (Hegel 1807, 2018). The findings suggest identification with the cooperative leads to increased trust, which results in heightened commitment to the cooperative's strategy. The chapter hypothesises that members who feel their voices are heard and valued are more likely to engage in cooperative governance and decision-making processes, supported by the findings indicating how the perception of control mediates the relationship between identification and trust. However, the findings also identified historical challenges, such as corruption and political interference, which pose significant obstacles to building trust. Overall, the chapter highlights cooperatives' potential to foster social and institutional trust in rural Tanzania and how the self-regulating engine of the cooperative experiences high voluntary compliance when it reflects the members' collective identity and shared values.

The fourth chapter delves deeper into the role of cooperatives in rural areas. I argue that cooperatives can bridge the gap between informal community norms and formal state regulations, facilitating smoother economic transactions and greater market integration for smallholder farmers. Driven and controlled by community members, cooperatives align closely with community rules and norms. While norms may be ambiguous, the cooperative can act as a norm-clarifying force, particularly valuable in instances of rule breaches. A successful trust-enhancing cooperative will create rules and guidelines that would extend to the broader community, serving as a focal point where the expectation of compliance fosters actual compliance by both members and non-members, creating a self-reinforcing cycle. The findings suggest that cooperative membership effectively signals trust, as evidenced by increased investments in trust games when farmers interact with cooperative members compared to non-members. This behaviour suggests that members perceive lower transaction costs and higher expected value within the cooperative framework. By creating a trusted environment, cooperatives help mitigate the uncertainties and costs associated with formal contract enforcement, facilitating smoother economic transactions and encouraging greater participation in collective economic activities. However, for this process to initiate and for the farmers to set aside short-term gains and become cooperative members, the terms of the agreement must align with farmers' preferences.

To understand these preferences, I conducted a discrete choice experiment, gaining comprehensive insights into the factors influencing farmers' decision-making processes regarding marketing their crops. Semi-structured interviews with farmers and key informants helped identify crucial attributes for market entry. The final list of attributes includes price, payment structure (risk sharing and delay in payment), place of transaction, benefits (input provision and access to credit), and the legality of the buyer. The findings reveal that, aside from price, the legality of the buyer is the most valued attribute for farmers when selling their crops. This preference could suggest a general lack of trust in the trading environment, where a legal document (permit) for buying cash crops signals trust and reliability. Alternatively, it may reflect what Václav Havel described as "*post-totalitarianism*", where citizens are locked into a

power structure, enslaved to follow society's "*auto-totality*" (Havel 1985). This dynamic underscores the pervasive control in post-totalitarian states, where outward conformity masks inner cynicism and distrust. Hence, compliance with legal frameworks often stems from fear of repercussions rather than genuine trust.

Chapter 4 concludes that cooperatives hold the potential to harmonise the informal and formal systems, fostering trust and enabling more intricate economic interactions. However, this role must be carefully managed to protect vulnerable farmers from potential exploitation. By focusing on economic and social protections, cooperatives can help ensure that the benefits of market integration are equitably distributed, supporting the long-term resilience and prosperity of rural communities.

In the **fifth and final chapter**, co-authored with Hanna Berkel and John Rand, the PhD thesis transitions from examining farmers in Tanzania to investigating firms in Mozambique, focusing on what determines their compliance with laws and regulations. This study aims to address a gap in the literature by systematically quantifying the relationship between governance quality, political legitimacy, and law compliance among firms in a majority country context. Good governance is defined as the government's effectiveness in delivering key political goods such as security, the rule of law, transparency, political participation, and human development (Rotberg 2018). The paper highlights the distinction between subjective and objective governance measures, suggesting that subjective measures, reflecting firm owners' perceptions, more accurately predict behavioural responses than objective measures. This discrepancy arises from the gap between *de facto* and *de jure* legal structures; although Mozambique's *de jure* legislation aligns with international standards, its *de facto* implementation and enforcement are weak (Berkel 2018; Ford and Ihrke 2019).

The analysis breaks down governance into multiple components: transparency, legal security, and infrastructure quality, and investigates whether political legitimacy serves as a mediator or moderator in the governance-compliance relationship. The findings reveal that increased transparency, particularly through regular meetings with provincial officials who seek feedback from the private sector, positively influences firms' compliance with laws and regulations. This supports previous studies indicating that government openness to citizen consultation leads to higher compliance, even in non-democratic states (Malesky and Taussig 2017). The predictability of legal changes and the accessibility of government documents also correlate positively with compliance, especially for smaller and informal enterprises. However, contrary to theoretical expectations, perceived legal security does not significantly influence compliance, potentially due to the limited use of formal judicial systems by firms in Mozambique. Political legitimacy, while positively correlated with compliance behaviour, does not serve as a mediator between governance and compliance. This implies that, though crucial, legitimacy operates independently from other governance elements in influencing compliance.

Moving beyond neoclassical economics to a focal point approach with behavioural features necessitates acknowledging both the multiple preferences within individuals and the distinctions between selfish and moral preferences. This creates complex interrelations. The chapter argues that effective governance, characterised by transparency, security, and well-functioning infrastructure, increases firms' willingness to comply with regulations. This, in turn, fosters a more conducive business environment and enhances the legitimacy of regulatory authorities. When citizens perceive local governments to be politically legitimate, their intrinsic motivation to abide by the rules voluntarily increases, translating into actual compliance and creating a positive feedback loop. As such, effective governance and perceived political legitimacy reinforce each other, leading to sustained regulatory compliance and a stable, well-functioning

society. This argument effectively ties together the complex relationships between governance, legitimacy, and compliance, highlighting the importance of perceived legitimacy in fostering voluntary adherence to rules and regulations.

In conclusion, the PhD thesis contributes to the literature on how market-economic regulations impact food security and development among the poorest groups in the Global South, with Tanzania and Mozambique as case countries. The analysis spans key themes such as agricultural trade liberalisation, structural transformation through economic diversification, and the role of cooperatives in building social capital and aligning market transactions with farmers' preferences. These findings are framed against the backdrop of legal frameworks that aim to foster compliance, trust, and governance—essential elements for sustainable market reforms and food security.

Several critical insights emerged from the analysis:

- *Importance of balanced trade policies*: The analysis of agricultural trade liberalisation demonstrates the necessity of policies that consider local agricultural contexts and food security. While open markets offer growth potential, they must be carefully managed to protect vulnerable populations and ensure equitable benefits.
- *Targeted industrial policies*: Identifying and promoting specific sectors through industrial policies can drive structural transformation and economic diversification. The focus on agro-processing industries, among others, aligns with Tanzania's existing capabilities and offers a pathway for development and job creation.
- *Role of cooperatives in building trust*: Cooperatives can potentially bridge the gap between informal community norms and formal state regulations, fostering trust and facilitating economic transactions. Active participation in cooperatives enhances social and institutional trust, which is vital for communal advancement and economic stability.
- *Governance quality and compliance*: Effective governance, characterised by transparency, legal security, and infrastructure quality, significantly influences firms' compliance with laws and regulations. Political legitimacy, while important, operates independently from other governance elements, highlighting the complex interplay between governance, legitimacy, and compliance.
- *Law as a focal point*: Across all chapters, the law's role as a focal point emerges as a central theme. By setting clear expectations and aligning individual actions towards mutually beneficial outcomes, the law facilitates economic growth, social well-being, and development.

The thesis aimed to illuminate how legal rules and societal norms interact to influence behaviour, emphasising the importance of creating transparent, secure, and well-managed institutional frameworks that not only enforce compliance but also build and maintain trust and legitimacy.

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