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Institutional work: how lenders transform land titles into collateral in urban Tanzania

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Abstract

We examine the 'institutional configuration' that makes land titles work as collateral in Tanzania's nascent credit market, through the 'institutional work' of local lenders. This work is effective and precarious: while lenders seek out and create institutional complementarities across diverse domains, they also require higher-level regulation to help stabilise land titles' fungibility as collateral. Our results contribute to knowledge on path-dependency, contingency and uneven trajectories in the property-credit nexus development, and advance understandings of institutional interdependencies and coevolution in the situated economy. By combining deep contextualisation and institutional analysis, we progress an empirical engagement with institutional research in economic geography.

Keywords: Institutions, institutional configuration, institutional complementarity, property rights formalisation, credit markets development, Tanzania
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1. Introduction

Since Hernando De Soto (2001a, 2001b) reignited the idea that land titles could transform land held informally from 'dead capital' into valid collateral, property rights formalisation has been proposed as a solution to credit access and a path out of poverty in the Global South. Embracing the neoliberal principles of private property and market institutions, this idea has found significant purchase with the World Bank (Deininger, 2003) and within the broader development community—although many have remained steadfastly critical (Mitchell, 2005; Musembi, 2007; Bromley, 2009; Gilbert, 2012; Hetherington, 2012; Jones, 2012; Obeng-Odoom, 2013). In practice, financial organisations have often resisted accepting land titles—especially from the poor (Payne et al., 2009; Bateman, 2020; Rao et al., 2022), and while the ability to leverage a title deed for credit finally gathers pace in some contexts (Gerber, 2013; Green, 2019; Bateman, 2020), title deeds alone are certainly insufficient to secure loans (see Domeher and Abdulai, 2012; Sanjak, 2012 for reviews of the empirical evidence). Instead, both tangible and intangible collaterals are vital to build 'confidence and trust' in the credit–debtor relationship (Lazzarato, 2012, 41). Turning land into a financial asset requires the fine labour of credit officers in collaboration with local authorities and experts to value land, verify titles and enforce contracts, which have been understood as socio-technical and political processes (Green, 2019, 2020). At the same time, the credibility and effectiveness of property rights depend on the presence of an enabling institutional environment comprising complementary institutions (Koroso et al., 2019). However, there is no empirical research on the 'institutional configurations' that make land titles work as collateral on the ground, particularly through the 'institutional work' of lenders who negotiate across multiple regulations and practices to screen and mitigate risk. Exploring these relations is important to understanding how the property-credit nexus develops and, more generally, how institutions emerge, evolve and function in specific contexts.

Combining the deep contextualisation of economic geography (see Martin and Sunley, 2015; Pike et al., 2016; Gong and Hassink, 2019) with an institutional analytic approach, this article provides a case study of how nine banks in Dar es Salaam, Tanzania, attempt to make land titles work as collateral in an emerging institutional configuration. In the 1990s, the country led a new wave of land (and credit) reforms in sub-Saharan Africa adopting a gradual approach to tenure formalisation via interim and longer-term leaseholds (Manji, 2006; McAuslan, 2013). Specifically, the Residential License (RL)—a statutory intermediary property right introduced in the early 2000s—was designed as an affordable option for the urban poor with the aim of pursuing poverty alleviation through property formalisation and land collateralisation, at least, in part (Kironde, 2006; Manara and Pani, 2023a). However, only 5% of all RLs issued between 2005 and 2017 have been used as collateral (own estimation from government data).[1] According to prior research, this title deed does not provide enough security for lenders in Tanzania's difficult credit sector. While some lenders do not accept the RL at all, others impose restrictive conditions that discourage its use by the poor (Sheuya and Burra, 2016; Kusiluka and Chiwambo, 2019). This article examines how lenders make the RL fungible as collateral in a pluralist and evolving institutional environment, where other de facto and de jure ownership documents are also used, and the government promotes incremental land policies, which we observed in motion during our 4 years of research. First, we map the institutional configuration where the RL nests, identifying a lack of formal documents and processes that produce specific risks for lenders. We then examine how lenders reduce risk and enhance the collateral potential of the RL by crafting complementary institutions on the ground. Finally, we demonstrate that the institutional work of lenders results from iterative efforts to maintain the fungibility of the RL in the long term—despite of ever-emerging risks. In a credit sector where non-performing loans remain higher than nationally acceptable targets (BOT, 2020), lenders need the support of higher-level regulation to stabilise the institutional configuration of the RL, if they are to continue accepting this collateral and improve the terms of RL loans.

While prior studies argued that the simple instigation of title deeds is—*per se*—neither necessary nor sufficient to reduce risk for lenders (e.g. Domeher and Abdulai, 2012; Sanjak, 2012), our institutional approach goes much further in examining *why* this is, and *how* land titles are made fungible despite persisting risk. Furthermore, our evidence contributes to illuminating the role of multiple actors and regulatory frameworks in constructing the legitimacy and viability of property rights in given contexts (Fogelman and Bassett, 2017; Abubakari et al., 2020; Green, 2019, 2020; Goodfellow and Owen, 2020; Manara and Pani, 2023a). In this case, on one side, higher-level actors (e.g. the state with its Ministry of Lands and municipalities) produce distinctive and ever-evolving risks in

1 Sheuya and Burra (2016) estimated a rate of 2% by 2012. It is possible that this has doubled in the next 5 years.

the institutional configuration of the RL. On the other, lower-level actors (i.e. financial organisations and loan officers) mitigate risk by crafting and maintaining functional interdependencies on the ground. By showing that the institutional work of lenders (i) builds upon multiple regulatory frameworks (i.e. the state rule-of-law, the bank's regulation and the local social norms), (ii) varies in space and time and (iii) is both effective and precarious, our case study contributes to understanding how land is turned into a financial asset through the screening processes of banks (Field and Torero, 2004; Domeher, 2012; Dower and Potamites, 2014) and the institutional bricolage of credit officers (Karim, 2011; Kar, 2018; Green, 2019). It also provides new knowledge on the economic actors of the nascent financial markets of the Global South (Hall, 2011; Ouma, 2016), which received increasing attention in financial geography (see Newman, 2020 on sub-Saharan Africa; but also Martin and Pollard, 2017; Mader et al., 2020; Green, 2022).

By offering a thick description of economic institutions, their functional interdependencies and coevolutionary trajectories, this article also contributes to a growing engagement with institutions in economic geography (e.g. Martin and Sunley, 2006, 2015; Bathelt and Glückler, 2014; Hassink et al., 2014; Pike et al., 2016). We address an empirical gap in this literature (Gertler, 2010, 2018; Rodríguez-Pose, 2013, 2020) through the application of theoretical concepts—'institutional configuration', 'institutional complementarity' and 'institutional work' (presented in the next section)—and by investigating the property-credit nexus—institutional areas that deserve further attention in the discipline (Zukauskaite et al., 2017). Furthermore, we contribute to developing these concepts and their analytic potential. First, by examining 'institutional complementarity', we illuminate one specific mechanism of institutional interdependence and coevolution advancing prior understandings of 'institutional configurations' in economic geography (see Martin, 2000; Grillitsch, 2015; Martin and Sunley, 2015; Zukauskaite et al., 2017, who use different terms; Harris, 2021 and Schröder and Voelzkow, 2016, but also Gertler, 2010). Second, by examining the 'institutional work' that makes and maintains functional interdependencies on the ground, our study contributes to understanding the bottom-up, contingent and precarious nature of 'institutional complementarity' (see Boyer, 2005; Streeck and Thelen, 2005; Deeg, 2007). More broadly, this case study demonstrates the importance of examining moments of institutional formation and change to deepen understandings of the situated, contingent and uneven nature of the economy, which is the subject of economic geography (Martin, 2000; Peck, 2013).

In the next section, first, we position our working definitions of institutions and institutional configuration in recent literature. We then introduce the concept of institutional complementarity and discuss the assumed nexus between property rights and credit markets. In Section 3, we set out background information on the land, property and credit nexus of Dar es Salaam, detailing the RL in relation to two other important proofs of ownership: the informal sales agreement (SA) and the long-term leasehold—the Certificate of Right of Occupancy (CRO). The article continues by describing the methodology, results and conclusions of our research.

2. Institutions, institutional configurations and complementarity

Since early engagements with institutions in economic geography (Martin, 2000; Philo and Parr, 2000; Amin, 2001), institutional approaches developed in the sub-fields of institutional economic geography (e.g. Gertler, 2010), evolutionary economic geography (e.g. Boschma and Frenken, 2006; Martin and Sunley, 2006), geographical political economy (e.g. Pike et al., 2009) and at the intersections of these sub-fields (Bathelt and Glückler, 2014; Hassink et al., 2014; Martin and Sunley, 2015; Pike et al., 2016). Economic geographers have provided several definitions of institutions (e.g. Martin, 2000; Rodríguez-Pose, 2013; Bathelt and Glückler, 2014), which generally build on North's (1990, 3) understanding of institutions as the 'rules of the game' to illuminate the practical roots of institutions and their 'structuring' effects on the economy. For example, following North (1990) and Hodgson (2006), Benner (2022, 1526) suggests that institutions can be formal or informal, explicit or tacit, and must be created and accepted by agents as 'social guidelines for appropriate and legitimate behaviour'. In this sense, institutions are 'templates for action' meaning that they are not identical to practices, but neither are they separate from them (i.e. pure social structures). Rather, 'institutions are what agents imagine practices should be', thereby shaping their expectations and having real causal effects on social processes (Benner (2022, 1526). Indeed, the role of expectations is central in differentiating between institutions and routines (Bathelt and Glückler, 2014).

In studying how particular production and accumulation regimes gain stability (e.g. varieties of capitalism), historical institutionalists referred to systems of institutions interacting across diverse domains or spheres of the economy (Hall and Soskice, 2001; Streeck and Thelen, 2005; Hall and Gingerich, 2009) while economic geographers underscored the spatial scale of institutional interactions (Gertler, 2010; Storper, 2010; Grillitsch, 2015). For example, the early work of Martin (2000) describes an 'institutional regime' comprising an 'institutional environment'[2] and 'institutional arrangements' that interact and affect one another to sustain the economy. In his view, the institutional environment encompasses formal and informal regulations, rules, conventions, customs and norms, while institutional arrangements are organisational forms, such as markets, firms and regulatory agencies. Other scholars have used concepts, such as 'institutional thickness' (Amin and Thrift, 1994; Zukauskaite et al., 2017), 'institutional architectures' (Gertler, 2010), 'institutional frameworks' (Grillitsch, 2015) and 'institutional configurations' (Stephan et al., 2015; Harris, 2021),[3] which refer to a constellation of institutions shaping the economy—although 'the interdependencies between (. . .) multiple types of institutions, erected at different spatial scales, remain rather obscure' (Grillitsch, 2015; Grillitsch and Sotarauta, 2020).

Drawing on these authors, we use the term *institutional configuration* to denote a system of institutions that regulate various domains of socio-economic life across spatial scales. As with Martin's institutional environment (Martin, 2000; Martin and Sunley, 2015), the institutional configuration encompasses formal and informal institutions that are 'more or less compatible' providing constraints, incentives and resources for human behaviour (Stephan et al., 2015). However, we prefer the term *configuration* since it underscores the, often, *engineered* nature of institutional interactions. In line with Martin (2000), Gertler (2010), Zukauskaite et al. (2017) and others, our definition of institutional configuration separates institutions from actors to examine how the latter create, enact and change institutions, while also being affected by them. Indeed, economic geography is increasingly concerned with agency, for example, in recognising that firms shape the

2 This term is also used by Martin and Sunley (2015).

3 Harris (2021) focuses on cluster institutional configurations while Stephan et al. (2015) consider how both formal and informal institutions configure to affect the behaviours of social entrepreneurs.

conditions of their economic survival and success by modifying their institutional environment based on reflexive thinking and updated knowledge (Bathelt and Glückler, 2014; Martin and Sunley, 2015; Dawley et al., 2019; Gong and Hassink, 2019; Grillitsch and Sotarauta, 2020; Benner, 2022; Harris, 2021).

Importantly, institutions and institutional configurations are marked by contingency, both in the sense of being dependent on local agency and open to uncertainty and change. Agents can create, maintain and disrupt institutions through 'institutional entrepreneurship' (e.g. Battilana et al., 2009) and 'institutional work' (e.g. Lawrence et al., 2009), whereby the former entails deliberate actions to diverge from existing institutions, whereas the latter includes day-to-day activities to make institutions work on the ground (Benner, 2022, 1526). And yet, economic geography still lacks empirical studies that open up the black box of an institutional configuration to show how actors actively shape institutional interaction and evolution across domains and scales, thereby 'leading to differentiated social and economic outcomes in urban regions' (Gertler, 2010, 2). This article now turns to the concept of institutional complementarity as a central driver of institutional change and economic outcomes within an institutional configuration. While this concept has been somewhat neglected due to critiques of functionalism per se, we suggest that unpacking how actors seek out complementarities on the ground can help explain how institutions emerge, evolve and function in specific contexts.

2.1. Complementarity

To ensure the viability and coherence of a socio-economic system, each institution needs some complementary counterparts (Boyer, 2005; Streeck and Thelen, 2005). For Hall and Soskice (2001, 17), complementarities exist when two or more institutions have functional interdependencies, which produce joint returns and enhance the performance of actors. Put more formally, Boyer (2005) notes that the joint returns of complementary institutions are Pareto improving with respect to the existence of only one of the two entities.[4] Therefore, according to Deeg (2007, 611) 'the whole is more than the sum of its parts'. To be clear, it is important to distinguish between complementarity and other concepts like institutional compatibility or coherence (Amable, 2000; Boyer, 2005; Crouch et al., 2005). On the one hand, institutions can co-exist and connect with one another without generating functional interdependencies (Grillitsch, 2015). On the other, complementarity can also be the by-product of incoherent institutions (Schröder and Voelzkow, 2016). From this perspective, complementarity is not a necessary feature, nor a natural outcome, of all institutional interactions.

While many things could be added to the definition of complementarity, we observe that complementarity is an important driver of institutional formation, change and coevolution within an institutional configuration. First, the actors who 'play the game' of a socio-economic system evaluate the expected and actual returns of institutions on the ground. Reflecting on this through their daily practices, actors will craft or navigate complementarities to enhance their economic performance, thereby promoting (or resisting) institutional change at the system level (Boyer, 2005; Deeg, 2007). Thus, functionalist accounts that conceive complementarities made from the top-down and through policy design based on

4 $R(E, E') > R(E)$ and $R(E, E') > R(E')$

efficiency considerations (Deeg, 2007) must be integrated with more complex and real explanations of complementarity. As Streeck (2005, 365) asserts: to be useful,

> [any] concept of complementarity must entail a credible account of the origin of complementarity in the absence of a grand design or a master designer. This means that 'economising' in the sense of adjusting institutions to make them more productive by making them more complementary, must be conceived largely as taking place 'on the ground' and bottom-up, by discovery, improvisation and serendipity.

Second, institutional complementarities are significant drivers of coevolution within an institutional configuration, because any change in one institution will require and precipitate change in the other one(s) (Murmann, 2003, 2013; Boyer, 2005; Schamp, 2010). Finally, complementarities introduce 'hierarches' if one institution absolutely requires the presence of another one to be viable or sustainable across time and space (Boyer, 2005, 49), which defines the 'relative importance of one or a few institutions for the (. . .) dynamics of the institutional architecture' (Amable, 2000, 660).

Concepts of complementarity and hierarchy are important to understand the property-credit nexus championed by many governments and development organisations in support of land titling programmes in the Global South. Precisely, private property rights are seen as the pre-requisite of efficient credit markets and well-functioning capitalist systems (Boyer, 2005, 55). This view assumes that the title deed produces two important functions that enable lenders to '*avoid or manage risk*': first, it is a 'screening or signalling device' as higher-risk borrowers will be less likely to offer it, and second, it is 'the last resort to recover outstanding loans if everything else fails' (Domeher and Abdulai, 2012, 169–170, emphasis added). Even if the legal processes of foreclosure and repossession are often cumbersome and unprofitable, in practice, land titles serve as a 'technology of control' since lenders leverage the fear of land seizure to pressure borrowers into repayment (Green, 2019). While empirical research has challenged the idea that title deeds are sufficient—or even necessary—to mitigate risk for lenders, underscoring the importance of complementary requirements to handle risk in asset-based lending (e.g. Sanjak, 2012), by combining an institutional analysis with the deep contextualisation of economic geography (see Martin and Sunley, 2015; Pike et al. 2016; Gong and Hassink, 2019) this article goes much further in exploring *why* this is and *how* land titles are made fungible by lenders on the ground—despite persisting risk.

Mobilising concepts of institutional 'configuration' and 'complementarity' through empirical research, the remainder will offer a thick description of property and credit institutions, their functional interdependencies and coevolutionary dynamics of change, through the 'institutional work' of lenders on the ground. Recent reviews of the institutional literature in economic geography underscored limited empirical research to explain how institutions are formed, function and evolve in real contexts, which is in part due to a lack of operational concepts and methodologies (Gertler, 2010, 2018; Rodríguez-Pose, 2013, 2020. See also Gong and Hassink, 2019; Benner, 2022, calling for more empirical work on the coevolution of institutions and the economy). Furthermore, most empirical research has focused on studying how institutions affect the regional economy, path-dependence and path-development in industries and clusters (e.g. Boschma and Frenken, 2006; Murmann, 2013; Berg, 2015; Xin and Mossig, 2017), whereas property and credit institutions 'deserve' more attention (Zukauskaite et al., 2017, 331). In providing new applications and developments of the theoretical concepts presented in this section, our case study demonstrates their analytic potential to advance knowledge on the property-credit nexus in economic geography and geography more broadly (Green, 2022).

3. Background: the land, property and credit nexus in urban Tanzania

There are numerous actors and interests involved in reforming both property rights and credit markets in developing contexts, and whilst this article focuses on the institutional work of lenders shaping the property-credit nexus on the ground, still the broader institutional context cannot be ignored. During the 1990s, a broad swathe of socio-economic reforms occurred across sub-Saharan Africa, driven in large part by neoliberal structural adjustment programmes put in place by the IMF and World Bank (Manji, 2010; McAuslan, 2013). For example, to help correct perceived structural issues that underpinned the macro-economic instability of many developing nations during the 1970s, a 'new wave' of land reforms took place to privatise property rights, liberalise land markets, and open up credit markets to wider competition (Manji, 2010; McAuslan, 2013).

In Tanzania, De Soto's Institute of Liberty and Democracy played an active role in advising the government's land reforms, promoting land registration within the national poverty reduction strategy by suggesting that land titles would release the potential of land as collateral across the country (Kironde, 2006; Briggs, 2011). However, the National Land Policy and the Land Acts of 1999 have not found easy implementation (Kironde, 2006). Over 20 years later, large areas of urban land are still held under unregistered de facto rights, while a series of policies and programmes try to stimulate land regularisation (Manara and Pani, 2023b). Importantly, the property-credit nexus explained in the last section is continuously re-emphasised by major actors: from the World Bank (LTIP, 2017, 2021) to the Bank of Tanzania (BOT, 2011), and finally, the media creating expectations that land titles will provide easy access to credit.

In urban areas, such as Dar es Salaam, informal landowners typically hold an unregistered ownership document, the sale agreement (SA).[5] This is a simple sheet—sometimes handwritten—signed by the interested parties alongside local leaders or advocates who act as witnesses. It has long been used to certify the informal transfer of land and prove de facto rights. By law, the SA can be used as collateral for an 'informal mortgage' (Land Act, 1999, Part X, subsection 6). Conversely, the CRO grants long-term statutory leasehold rights on planned and surveyed urban land. Valid for 33–99 years (typically, 66 for residential land use), it is issued by the Ministry of Land, Housing and Human Settlements Development (MLHHSD) and registered in its cadastre under the Land Registration Act (2002, CAP 334). The CRO is obtained following regularisation schemes—a process that has gathered pace since 2016 (Manara and Regan, 2022).

Sitting between these ownership documents, the Residential Licence (RL) is a statutory intermediary property right specifically designed to kick-start formalisation across Dar es Salaam's consolidated informal settlements (Kironde, 2006; Manara, 2022; Manara and Pani, 2023a,b). The RL is considerably easier to obtain than the CRO and relatively cheap, costing around 10% of the latter. Despite its short validity (5 years, but renewable), it offers similar advantages to the CRO: administrative registration (at the municipality level), legal transferability and valid collateral for mortgages (Land Act, 1999). In line with the national poverty reduction strategy, a primary aim of the RL was to enable a

5 The SA is also a primary proof of ownership in rural areas and can, again, be used for an 'informal mortgage'.

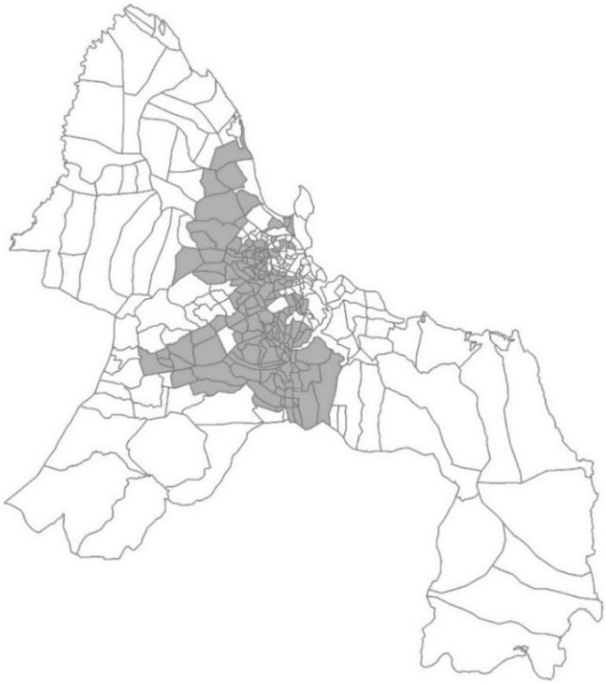

Figure 1. Residential Licence programme phase I (2004–2006).
Note: Dar es Salaam with grey areas representing *mitaa* (sub-wards) under the Residential Licence programme phase I.

spectrum of income levels to collateralise their land and access credit (Kironde, 2006; Kusiluka and Chiwambo, 2019). The RL programme was launched in 2004 to cover around 220,000 plots, radiating out from Dar's (mostly) planned city centre to its inner periphery, around 19 km from the CBD (Figure 1). About half of the eligible landholders initially acquired the RL and 17.5% of plots currently have one (Manara, 2022). Phase II of the programme was suspended for some years due to limited resources and financial returns, but was revived in 2019, targeting another 150,000 informal plots that stretch into the outer periphery of the city, and a further 1 million plots beyond Dar es Salaam (Stanley, 2020).

These land reforms have been accompanied by the liberalisation of the financial sector. In 1988, the Nyirabu Commission recommended allowing private providers to enter the sector to increase efficiency, access and economic growth through enhanced market competition (BOT, 2011). Spearheaded by the Banking and Financial Institutions Act (1991), by 2018, the sector grew from just 3 domestic commercial banks to 53 local and foreign mainstream lenders overseen by the BOT (BOT, 2018). Although challenged both on their transformative powers and efficacy (McAuslan, 2013, 2015), one aim of the reform was to widen access to credit to the poor by enabling the collateralisation of their landed assets (BOT, 2011).

Certainly, to date, most borrowing continues to occur within family and friends' networks (69%) (FinScope, 2017). Despite significant interest in the collateral potential of the RL (Shemdoe, 2012; Kusiluka and Chiwambo, 2019), only a minority of RL holders (conservatively, 5%) used this document to access credit by formal lenders (see also Kironde, 2006; Parsa et al., 2011; Collin et al., 2015; Sheuya and Burra, 2016; Kusiluka and Chiwambo, 2019). Kusiluka and Chiwambo (2019) find that some banks do not accept the RL due to its short-term validity, while others apply stringent underwriting terms and conditions to ensure the repayment capacity of the applicant. Indeed, Parsa et al. (2011) and Shemdoe (2012) report that many of their respondents (over 20%) had attempted to access credit with their RL, but the majority failed because they lacked other essential requirements. Sheuya and Burra (2016) suggest that successful applicants tend to have already profitable businesses, which challenges the pro-poor effects of the programme, underscoring the importance of examining how lenders assess and mitigate risk in relation to the RL (which is the focus of this article).

Despite Tanzania's land and financial reforms, the credit sector is still underperforming (BOT, 2020/2021). While the outstanding mortgage debt increased from 213 billion TZS in 2015 to 436 billion in 2020 (BOT, 2020), the ratio of non-performing loans to gross loans remains at 9.3%: well above the 5% target agreed between the BOT and mainstream lenders (BOT, 2020, x). Interestingly, the BOT identifies one of the sector's main weaknesses as an unreliable credit reference system (CRS). Launched in 2012, a primary purpose of the CRS was to lower risk by correcting for knowledge a-symmetries between the borrower and the lender (Clydeco, 2013), thereby increasing risk-based lending and reducing the sector's reliance on asset-based loans to improve performance and attract international investors. However, in 2013, the BOT stressed that many lenders were either not registering loans or were providing inaccurate information. Furthermore, many were not consulting the Credit Bureau for borrower ratings, making the whole system 'meaningless' (BOT, 2013). While the BOT makes regular efforts to train and 'sensitize' banks on this issue, scarce compliance still contributes to high rates of non-performing loans (see BOT Financial Sector Supervision Annual Reports from 2013 to 2020/21) (see Supplementary Appendix B1 for more detail).

4. Methodology

In institutional analysis, a major challenge is to operationalise theoretical frameworks and concepts for empirical research (Boyer, 2005; Deeg, 2007; Gertler, 2010, 2018; Rodríguez-Pose, 2013, 2020; Martin and Sunley, 2015; Gong and Hassink, 2019; Benner, 2022). For this article, we conducted an in-depth case study of Dar es Salaam's nascent credit market, represented by a purposive sample of nine mainstream lenders. This approach enables us to examine how agency and context affect the institutional work of lenders, combining deep contextualisation methods from economic geography (see Martin and Sunley, 2015; Pike et al., 2016; Gertler, 2018) with an institutional analytical approach. Further, unpacking the complex interplay between complementary institutions is, as Deeg (2007, 621) suggests, 'more amenable to individual inductive case study and small-n comparisons' of actors in the same sector and with varying institutional processes and practices. Importantly, qualitative comparison enables the researcher to better understand what actors themselves feel is 'optimal performance' and what combinations of institutions provide improved performance (Boyer, 2005).

For our sample selection, we consulted the database of one municipality (the only one that keeps digital records of RL used as collaterals) and identified ten credit organisations that provided the highest number of loans to clients with the RL (we assumed that the same lenders operated also in other municipalities, which was confirmed during the

Table 1. Details of lenders in sample

Banks (anonymised)	(1) Grp Tot Assets	(2) Grp Tot Loans and Advances	(3) Business loans	(4) Housing improvement loans	(5) Mortgage loans	(6) Salary loans
Bank 1	147,868 ($64.29)[a]	91,376 ($39.73)	Yes[b]	No	No	No
Bank 2	155,527 ($67.62)	82,996 ($36.09)	Yes[b]	Yes[b]	No	Yes
Bank 3	5,919,351 ($2573.63)	3,127,000 ($1359.57)	Yes[b]	Yes[c]	Yes	Yes
Bank 4	132,754 ($57.72)	87,019 ($37.83)	Yes[b]	Yes[b]	Yes	Yes
Bank 5	18,303 ($7.96)	[d]	Yes[b]	Yes	No	No[e]
Bank 6	579,879 ($252.12)	[d]	Yes[b]	Yes[b]	Yes[c]	Yes
Bank 7	40,067 ($17.42)	[d]	Yes[b]	Yes[c]	Yes	No
Bank 8	5,689,829 ($2473.84)	3,252,000 ($1413.91)	Yes[b]	Yes[b]	Yes[b]	Yes
Bank 9	562,345 ($244.50)	412,769 ($179.46)	Yes[b]	Yes	No	Yes

Note: Columns 1 and 2 report total group assets, loans and advances for each bank in the sample. Values in millions TSh and millions of USD in brackets. *Source*: Total assets data from BOT (2018, 29–31), total loans and advances from each bank's Annual Report (2018). Columns 3–6 detail the loan products offered by each lender in our sample, from authors' interviews. Business loans (column 3) support on-going businesses. Housing improvement loans (column 4) facilitate on-going construction activities on plots with, at least, building foundations. Mortgage loans (column 5) are conceived to buy land and start new construction or buy a property. Salary loans (column 6) are personal loans for employees with formal contracts and payslips. Some lenders also offer group loans, where borrowers guarantee for one another in a group (often, neighbours). Salary and group loans do not require landed collateral.

[a]The sums in brackets are millions of USD calculated using a conversion rate of 2300TSh to 1USD (rounded average for 2018–2019).

[b]Includes micro-credit.

[c]To start construction on land that the client already owns and uses as collateral.

[d]Missing information.

[e]There is a salary scheme, but only for internal employees.

research). Nine lenders agreed to participate after reviewing our draft questionnaire: eight commercial banks (which also provide micro-credit) and one micro-credit bank. These lenders present diverse profiles relative to their assets and loan portfolios (Table 1). At the research start, our sample corresponded to 20% of mainstream lenders in Tanzania, including 40 commercial banks and 5 micro-credit banks (BOT, 2018) and roughly 50% of financial organisations accepting the RL across the city (according to own estimates and data in Sheuya and Burra, 2016).

Most of our empirical results draw on 26 interviews in four waves (Supplementary Appendix Table A1, a). To capture the role of agency and triangulate information, we interviewed two respondents for each lender. To reflect on the spatial and temporal variation of the lenders' institutional work, we selected branches in both central-city and peri-urban locations, and we conducted interviews over 4 years. In December 2018, we undertook semi-structured interviews with respondents assigned by the banks. These data were coded and analysed, forming the basis for a more structured questionnaire conducted between January and March 2020. In August 2022, we had a final round of conversations to follow-up on the evolution of the lenders' institutional work.

The article is also informed by desk research of documents such as government legislation and banking sector reports (Supplementary Appendix Table A1, b). To triangulate information on institutions and processes described by lenders, we relied on further interviews with interested parties, including municipal land officers (6), sub-wards chairpersons (89 across 52 neighbourhoods)[6] and land lawyers (4). Finally, researching the implementation of land reform in Dar es Salaam for several years, we were able to discuss these issues with Land Registry officials at the MLHHSD (mostly unrecorded), which enabled us to conduct further triangulation of the data.

5. Making land titles work as secure collateral

For all interviewees, the unregistered SA involves the highest risk to lenders, the RL presents medium risk, while the CRO is the most secure. The SA 'are merely papers. . .not registered' and there is no authority 'where you can make an official search' (A.M., Bank 7). Thus, they could easily be forged, and land conflicts or existing encumbrances could complicate repossession in case of default. Instead, the RL is 'somewhat' formal: it is government-backed, but it only exists in the informal settlements 'that the government decided to put a little bit formal' (O.S., Bank 3). Its short-term validity opens up the risk of land-value fluctuations and requires cooperation from the plot owner for the renewal process, making the CRO a stronger collateral.

While many respondents spoke about the unregistered SA with outward suspicion, Table 2 (below) shows that the title deed is not a pre-condition to access credit. Most banks (except one) accept the SA to increase their loan portfolio and survive in a competitive market. Furthermore, there is no evident relationship between bank size (proxied by the group total assets) and propensity to lend against various collaterals. For instance, the two largest banks have very different shares of SA loans, which can be explained by the location of the selected branch. That is, the acceptability of diverse proofs of ownership responds to spatial and temporal dimensions: the security of this collateral depends on the location of the land, the history of ownership and the possibilities for obtaining higher collaterals at a given time. Thus, all branches in peripheral locations have significantly higher shares of SA loans. As we will see, these geographic patterns of perceived risk and opportunity may create uneven conditions of access to credit across the city, producing or reinforcing existing socio-spatial inequalities (see also Walks, 2013, on uneven 'urban debtscapes').

Even if land titles are more effective than the unregistered SA in reducing risk for lenders, on the other hand, it appeared clear that secure loans depend also on the availability of further formal documents and processes to codify information on the land, the borrower, their assets and finally the loan itself. In the next section, we will map the institutional

6 These interviews occurred first in 2018 (52) then again in 2021 (52) following the local elections through which 37 leaders were replaced (total leaders 89).

Table 2. Share of landed loans pledged against each collateral type

	B1	B2	B3	B4	B5	B6	B7	B8	B9
Grp Tot	147,868	155,527	5,919,351	132,754	18,303	579,879	40,067	5,689,829	562,345
Assets	($64.29)	($67.62)	($2573.63)	($57.72)	($7.96)	($252.12)	($17.42)	($2473.84)	($244.50)
Branch Location	CBD	non-CBD	CBD	non-CBD	CBD	CBD	CBD	non-CBD	CBD
% SA	5%	50%	5%	80%	30%	10%	NA	70%	20%
% RL	50%	30%	25%	10%	50%	35%	50%	20%	40%
% CRO	45%	20%	70%	10%	20%	55%	50%	10%	40%

Note: Total assets data from BOT (2018, 29–31). Values in millions TSh and millions of USD in brackets. We report the percentage of landed loans pledged against each ownership document (SA, RL and CRO) by the branch, according to respondents (from authors' interviews, 2020).

Table 3. Institutional configuration affecting the fungibility of ownership documents as secure collateral.

Domains			
(1) Land collateral	(2) Borrower	(3) Asset	(4) Loan
Ownership document (RL, CRO)	Personal ID	Business licence	Loan contract
Official search report	Proof of borrower address	Business tax receipt	Loan registration report
Surrender form	Proof of marital status	Building permit	
Land rent receipt	Proof of creditworthiness (work contract, payslip, business turnover, bank account, credit rating)	Property tax receipt	

Note: Each column shows a list of documents that support title deeds in providing essential information on the land collateral (column 1), the borrower (column 2), their assets (column 3) and the loan itself (column 4).

configuration of the RL (Table 3), identifying what complementary institutions are lacking and raise risk for lenders. We will then analyse the institutional work of lenders as they fix this institutional configuration by making functional interdependencies on the ground to mitigate risk and enhance the collateral potential of the RL. Indeed, as Lazzarato (2012, 41) notes, 'confidence and trust' in the credit–debtor relationship 'require [both] tangible and intangible collateral', which necessitates considerable work on the part of lenders (see also Green, 2019, 2020).

5.1. The institutional configuration of the RL: identifying risk

Within the domain of the collateral (Table 3), the purpose of a title document is to codify and register the key facts of property relations: *who* owns *what* land. Accordingly, the RL records the owner, neighbourhood, size and shape of the plot within a digital database, a paper document and a map. The relevant municipality can produce an official search report, verifying that the RL is genuine, contains updated information, and there are no conflicting interests (land disputes, loan encumbrances and unpaid rent). However, lenders are wary that the information in these documents might not match the *de facto* ownership of land. For example, the RL does not attribute addresses, streets, block and plot numbers or even geo-coordinates that can help the loan officers identify the collateral in the field. Therefore, the borrower could mislead them to the wrong plot. By law, the relevant authority should record all changes of ownership, for example in case of inheritance, sale or subdivision. Municipalities should intervene in land disputes and integrate their outcomes into the database. However, in practice, many people still handle these processes informally and do not report to the relevant authority, which, in turn, does not 'do' enforcement on the ground (Manara and Pani, 2023a). Sometimes municipalities only keep manual records of changes of ownership that are difficult to consult. So, Bank 5 found instances of RL recorded in one person's name having multiple owners instead. Other lenders explained that 'at the municipality they do not know about land conflicts, really' (A.M., Bank 7), but 'as a loan officer, you must know where the collateral is located and cross check the ownership' (E.M., Bank 1).

Lenders noted another distinctive downside in the institutional domain of the collateral, where the two land registration systems do not communicate with one another and generate separate search reports. That is, the municipal report would not say if the holder of the RL also has a CRO, which raises uncertainty regarding the *exclusivity* of property relations stated in the RL. To be clear, while the SA has a long history dating to well before the 1999 Land Act, the introduction of the RL in 2004 meant that some 180,000 informal landholders could possess both the SA and RL and use them as collateral with different lenders. Since the SA 'does not provide rights in case of default' (O.S., Bank 3), the bank holding the RL would repossess the collateral. The situation was becoming similar in those settlements under the RL programme where regularisation schemes were now underway. In fact, it would be illegal to hold both title deeds, since the Land Act prescribes that the Land Registrar should surrender the RL before issuing a CRO (Supplementary Appendix B2). However, until very recently, the actual process of surrender was not properly set up and implemented. Thus, there have been cases where the borrower took out a loan against the RL and then obtained a CRO, using it as collateral at another bank. This made repossession particularly complex,[7] and raised the risks associated with the RL (see Green, 2020, highlighting similar issues in the Cambodian context).

Even if the RL documents provided complete information on the collateral, still lenders require the support of functionally interdependent institutions to ascertain the *who* of property rights through personal documents, such as identity cards, proof of address and marital status, which are not widely available in this context. In the absence of identity cards, the name and surname of the landowner written on the RL are not unique to individuals, and our respondents experienced cases of forgery. Without official proofs of address, such as utility bills, borrowers have stated false addresses and made themselves untraceable.

7 If the borrower cannot repay both lenders, they may agree a settlement between one another, or they must fight in court. The court will try to establish negligence between the parties: did the Land Registrar make due diligence in the surrender process? Did the lender with RL register the loan with the municipality and the Credit Rating Bureau? Did the lender with CRO check these databases? Note: All lenders described using informal processes in the first instance to negotiate repayment in the case of general defaults, many of which were successful depending on the client: 'If they show commitment, cooperation, we can negotiate how much they can pay' (Bank 2). However, actual repossessions are all undertaken formally whereby demand notices are issued, followed by some form of official receivership, property auction and, ultimately, action through the courts (if needed)—see also Land Act 1999, Section 125 (3).

Further, lenders have experienced 'many frauds' when trying to ascertain the marital status of the borrower (T.M., Bank 7). This is critical since the Law requires that banks do due diligence and obtain spousal consent to the loan; otherwise, the spouse could oppose the repossession of the marital property in case of default (Supplementary Appendix B3).

Importantly, lenders worry about the creditworthiness of their applicants and their capacity to repay the loan, 'even before considering the collateral' (O.S., Bank 3), but most people do not have work contracts, pay slips or official proofs of business turnover, bank accounts or credit ratings, as often underscored by the literature (e.g. Domeher and Abdulai, 2012). Most borrowers are self-employed, and these will need to collateralise the business in addition to the land, regardless of the ownership document and for all categories of loans (i.e. not only for business loans). However, many people still do not have business licenses, tax codes and tax receipts to prove that their business is legally registered, though in recent years the government has certainly invested to increase compliance and facilitated registration for small businesses.

Finally, secure loans also need strong institutions to document the loan itself. Namely, the loan contract is key to mitigating risk for lenders, for example, by establishing unfavourable contractual terms for higher-risk loans, such as smaller amount, shorter maturity and higher interest rates. Additionally, registering loans by the Credit Rating Bureau should provide extra protection and enable other lenders to search if an applicant has encumbrances against diverse categories of collateral (e.g. land, chattel) across the country. Certainly, defining effective loan contracts is in the remit of lenders (see next section) and all respondents recognised the potential usefulness of the loan registration system. However, many think that it is not sufficiently developed, so they would not systematically register their loans or even consult the Credit Bureau, which in turn contributes to keeping information incomplete and potentially inaccurate (see background section and Supplementary Appendix B1), producing further risk in the institutional configuration of the RL.

5.2. The institutional work of lenders: making the RL fungible

To mitigate risk and enhance the collateral potential of the RL, lenders define limits to the contractual terms by prescribing that *the RL may (or may not) be used as collateral to access a given loan type under certain terms (e.g. loan size, maturity and interest rate)*, illustrated in Supplementary Appendix Table A2. First of all, we note that the RL is mostly accepted for business loans, where the business provides extra collateral (this is precisely why further proofs of business registration and tax clearance are essential complementary institutions). Sometimes the RL holders can also access housing improvement loans, but generally, they cannot access mortgage loans, just like for the SA. Focusing on the regulation on business loans in Supplementary Appendix Table A3, we see that most lenders institute ceilings for both the RL and the SA (typically 50 million TSh (about 21,740 USD) for RL and 27 million TSh (about 11,740 USD) for SA).[8] Instead, business loans pledged against CRO are negotiable, based on the collateral value,

8 To offer some perspective: in our 2018 survey of 1363 households, we found that the typical household income in the informal settlements was between 150,000TSh and 250,000TSh per month. Incomes ranged from below 50,000TSh (12% of the population) to over 500,000TSh per month (almost 12%) (see Manara, 2022). Dollar amounts use a conversion rate of 2300TSh to 1USD (rounded average for 2018–2019).

the bank's single borrower limit and the business.[9] About half of the lenders provide shorter-term loans for both the RL and the SA. For example, one of the largest banks, Bank 3 sets its length of loan maturity to 18 months compared to 36 months for the CRO. In this way, the loan contract should offset the calculated level of risk of the RL.

Besides this relatively standard institutional work, almost all lenders have adopted a new institution of *local search*, which is functionally interdependent with the RL because it helps lenders to verify essential information. As summarised in Supplementary Appendix Table A4, *a loan officer must visit the collateral on site about two times before the loan debasement, of which one is by surprise, collecting references from neighbours and local leaders, and producing field reports*. Often, credit offers visit the local government office (mtaa),[10] involving the mtaa chairperson, an elected political figure that helps keep order and manage land in the community, even if their role and functions are not formally integrated within the state apparatus. In fact, these chairpersons work closely with the executive officer (an employee of the government) and other elected street leaders (Manara and Pani, 2023a; Manara and Regan, 2022). The institution of local search was originally crafted for the unregistered SA, where key information can only be collected from witnesses on the ground, but it has been extended to the RL and the CRO: 'it is always mandatory', (D.C., Bank 9) 'because the community know much in Tanzania' (T.M., Bank 7). Neighbours and local leaders 'can satisfy the bank that the applicant is the real owner and he lives there. Moreover, one must speak to the household and be sure that they aware of the loan application'. (M.I., Bank 4). Another officer added that 'neighbours will know if the client has a good history with people. Also, they will know of unpaid loans… they would notice a lender visiting to collect on the loan' (A.U., Bank 7). In sum, engaging with the local community is important to exclude ongoing or potential land disputes or encumbrances, and understand the character of the borrower, the quality of their business and broader issues of security in the area (e.g. environmental hazard, risk of demolition and presence of regularisation schemes). On the other hand, the mtaa chairpersons acquire important roles and responsibilities in this process to validate land titles, which potentially opens up grey areas for power relations and rent-seeking, as we discuss in a companion paper (Manara and Pani, 2023a).

Finally, lenders also prescribe that *the RL shall be supported by further evidence*, for example through the Introduction letter, the Collateral Verification Form and other ad-hoc papers, supplementing for the absence or the inaccuracy of essential formal documents and processes in the institutional configuration of the RL. As illustrated in Supplementary Appendix Table A5, the application process starts with a standard introduction letter from the mtaa office, stating that the person is a resident in that neighbourhood and wishes to apply for a loan. This is typically used to replace an identity card and a proof of address for a variety of purposes including opening a bank account or registering at school. After the local search, the loan officer will fill a Collateral Verification Form, which codifies a variety of information, including the names and contacts of the neighbours and local leaders (see Supplementary Appendix Table A6). In many cases, the latter will also be involved to sign this form. Two lenders require extra ad-hoc letters by the mtaa office: namely, Bank 1 requests a declaration that there are no planned demolitions, built-on

9 As a rule of thumb, the collateral value must cover 150% of the loan. Regulated by the Bank of Tanzania, the single borrower limit cannot exceed 25% of the bank's core capital.

10 The mtaa is the smallest administrative unit in urban areas, usually comprised of few thousand plots.

encroachments or environmental hazards, while Bank 7 requires a Marriage Verification Form signed by the mtaa chairperson. There is one case where the chairperson is also involved in witnessing the loan contract, since 'nothing should be kept secret from leaders' (M.I., Bank 4), and we note that most lenders require the spouse to sign the loan contract, even if they do not have joint ownership.

Comparing the institutional work of lenders in Supplementary Appendix Tables A2–A5 illuminates important diversities resulting from two scales of agency (at least). By defining loan terms and conditions, standard practices and further required evidence, the internal regulation of each bank certainly provides a framework where all branches dealing with RL loans should operate. Typically, larger banks (proxied by the group total assets) offer lower interest rates, but they offset risk by providing shorter maturity periods, and 50 million TSh (about 20,800USD) ceilings to RL loans (instead, smaller banks have higher or even negotiable ceilings). Larger organisations are also keener on the Collateral Verification Form, though the obligatory nature, the information and signatories of this document are also variable, as detailed in Supplementary Appendix Table A6. Furthermore, the regulation of each organisation offers some room for manoeuvre where loan officers can legitimately deny access to some loan products, play with the contractual limits, increase the number of site visits and require further forms and witnesses. For instance, M. I. manages a peripheral branch of a mid-size bank. Whilst he recognises the advantages of an RL (which is available in his area), he is less inclined to require one, since the unregistered SA is still the prevailing ownership document: 'it is part of our history… we have a huge customer base of low-income earners and we know that they cannot afford the registered title deeds' (M.I., Bank 4). When he handles RL loans, often he adopts the same processes he would use for the SA, asking the same questions during the local search and filling out the Collateral Verification Form, even if the bank does not require it. Ultimately, most officers tend to 'take extra precautions' (A.G., Bank 8) beyond the bank's regulation, acting 'for our comfortability' (A.H., Bank 5), based on their personal assessment and experience of risk, which contributes to diversifying the institutional work of lenders across the city.

5.3. Maintaining the fungibility of the RL in an emerging institutional environment

By analysing the institutional configuration of the RL and how lenders fix this by making functional interdependencies on the ground, the last sections provided a rather static examination of risk and responses by lenders. Conversely, this section adopts a dynamic perspective analysing what happens when risk evolves in an emerging institutional environment and discussing potential implications for both lenders and landowners. We will show that risk is ever-changing, responding to multiple actors of the property-credit nexus, as well as spatial and temporal factors. While the institutional work of lenders might be effective in fixing the institutional configuration of the RL at given moments, the functional interdependencies made on the ground are concomitantly fragile and unstable, requiring iterative institutional work to maintain the fungibility of the RL as secure collateral.

Focusing on a recent example: as detailed in the 'Background' section, the RL was introduced to kick-start formalisation across Dar es Salaam's consolidated informal settlements with the eventual aim that all unplanned settlements in the city—from the CBD to the outer periphery—would become regularised to CRO (unless earmarked as hazardous or for other purposes) (see Kironde, 2006). When the government initiated massive campaigns on the CRO and promoted policies instigating regularisation schemes (Manara and Pani, 2023b), a stronger security became available in many areas under the RL programme, raising a new risk for lenders (i.e. the potential duplication of interests on the same plot, as explained in section 'The institutional configuration of the RL'). Faced with further uncertainty, most lenders decided to simply suspend the acceptability of the RL: as one loan officer made very clear, she would not 'even dream' of accepting the RL in areas with ongoing regularisation (R.G., Bank 8). However, lenders quickly realised that this move was not sustainable, especially because regularisation schemes were proceeding at a slow pace and would take time to scale up. Therefore, since RL loans were necessary to survive in this competitive sector, lenders undertook further institutional work to mitigate risk and continue accepting this—increasingly uncertain—collateral. For instance, the leading commercial bank dropped the loan ceiling of the RL to the level of SA 'to reduce their risk of exposure'.[11] Also, lowering the loan maturity from 24 to 18 months 'raised confidence that landholders could not obtain a CRO by the same time' (R.G., Bank 8). In addition, the banks introduced a new institution into the configuration of the RL: the 'Commitment Letter'. This document was designed to substitute for scarce state regulation and monitoring of the surrender process by requiring the borrower to commit to not acquiring a CRO before repaying the current loan. In sum, adapting to an evolving institutional configuration was not straightforward: it required much iterative work by lenders and potential trial-and-error (indeed, lenders are still wary about the effectiveness of the Commitment Letter).

It is worth noting that an emerging institutional configuration characterised by evolving risk may have detrimental implications also for landowners. In this case, many lenders imposed important restrictions to allow them to continue accepting the RL despite the new uncertainty (e.g. by reducing the loan ceiling and maturity). However, such strategies make RL loans less favourable to landowners. Today, most lenders offer similar terms and conditions to clients with RL and SA. Yet, the RL came to the urban poor with promises of larger loans (regardless of suggestions that they may not want or may fail to obtain large loans, e.g. because of limited business turnover—see also Kironde, 2006). Most importantly, the urban poor may be required to obtain the RL to access some amounts, whereas the peri-urban middle classes (living where the RL programme has not been reached) could obtain better terms via the SA, which is less costly and bureaucratic. Further still, the gradual instigation of the CRO might eventually crowd out the RL, exactly as we have seen happening in areas under the RL programme where the SA is 'in theory, acceptable, but in practice highly discouraged' (A.H., Bank 5). This is especially the case (but not exclusively) as we move closer to the city centre where the MLHHSD has focussed much of its limited resources on informal settlement upgrades, and enabled regularisation schemes to take place. Indeed, loan officers can go far in 'advis[ing] the client' (E.M., Bank 1) and 'persuading them' (R.G., Bank 8) to acquire the higher security, which could jeopardise the collateral function of the RL for less affluent residents, when regularisation schemes are carried out *unevenly*, either because poorer areas are not designated for regularisation by the government, or because poorer residents cannot afford the fees.[12] In this way, the varied availability of competing proofs of ownership may translate

11 From 100million TSh (about 43,480USD) in 2018 to 50million TSh (about 21,740USD) in 2020.

12 Based on various economic and spatial motivations (such as proximity to high economic activity or existing levels of infrastructure), the MLHHSD designates areas for regularisation. The schemes are largely carried out by private companies. In theory, the aim is to regularise all plots in a designated Mtaa. However, in practice, this rarely occurs due to lack of buy-in from plot-owners who must pay for the CRO but are not forced to regularise.

into a spatially uneven distribution of credit risks and opportunities across the city, producing or reinforcing existing socio-spatial inequalities (see also Walks, 2013, on uneven 'urban debtscapes').

This example illustrates well the ever-changing nature of risk in time and space, revealing the iterative nature of lenders' institutional work and the fragility of functional interdependencies made on the ground. It also demonstrates the destabilising effects of a land policy designed by the government with no consideration for the institutional configuration as a whole. According to the lenders in our research, in this case, the government could have done more to maintain stability and avoid the risk of potential duplication of interests in the same plot, for example by properly defining and implementing the process to surrender the RL, by linking the two land recordation systems across the municipalities and the Ministry of Lands, and by including more detailed information on the type of collateral used within the loan registration system by the Credit Bureau (currently this does not show if the borrower used a SA, RL or CRO). As the evidence presented here suggests, it is important to question the notion that government intervention and regulation will automatically lead to greater stability within an institutional configuration.[13] However, lenders stated that the higher-level actors of the property-credit nexus should provide complementary formal registries, documents and processes to support their institutional work. In sum, lenders can go far in making functional interdependencies on the ground and enhance the collateral potential of the RL, but they also advocate for more government regulation to provide further complementary institutions in the institutional configuration of the RL.

6. Conclusions

This article set out to deepen understandings of the property-credit nexus in developing countries by examining how lenders make land titles fungible as collateral in complex and evolving institutional environments. We conducted a case study of nine mainstream lenders focusing on the RL programme of Dar es Salaam, Tanzania, which was specifically designed to enable credit access for the poor by providing interim statutory property rights at a relatively low cost. Analysing the institutional configuration of the RL, we identified specific risks associated with a lack of complementary institutions, such as formal documents and processes codifying information on the land collateral, the borrower, their assets and the loan itself. As we illustrated, lenders engage in a great deal of institutional work to craft complementary institutions on the ground, which are effective in making the RL fungible as collateral. However, they also face challenges when they need to maintain functional interdependencies in response to ever-changing risks, due to overlapping scales of agency, spatial and temporal factors in the property-credit nexus. In sum, the institutional work of lenders can be effective in mitigating risk and enhancing the collateral potential of the RL, but the institutional configuration of the RL remains overall fragile and unstable. As lenders underscored, there is a need for more government intervention and higher-level regulation to stabilise the institutional configuration of the RL, if they are to continue accepting this collateral and improve the terms of RL loans.

In alignment with the interdisciplinary literature on the property-credit nexus, it appears clear that the simple instigation of registered land titles cannot create a conducive

13 See also Manara and Pani, (2023b) on how the RL has suffered significant 'institutional drift' as the government has incrementally recognised layers of proof of ownership.

environment for lenders in Tanzania, and further complementary institutions (i.e. formal documents and processes) are needed. In examining how the property-credit nexus unfolds in one specific context, the article has made three contributions to the literature. First, our approach went far in explaining *why* title deeds alone are insufficient to provide secure collateral and *how* they can become fungible through lenders creating functional interdependencies on the ground, which are both effective and precarious. Second, we examined risk in a pluralist and evolving environment (which is a dominant reality in sub-Saharan Africa), where the co-existence of several de facto and de jure tenure documents and an evolving land policy requires constant adaptation by lenders. Finally, we considered overlapping scales of agency, underscoring the achievements of lower-level actors (lenders), but also their demand for further state regulation. Certainly, more research is needed to understand how the property-credit nexus unfolds in other contexts, and—crucially—if land titles are effective in providing targeted credit and benefits to the poor (a central issue which was not investigated in this article).

In conclusion, by offering a thick description of economic institutions, their functional interdependencies and coevolution, the article has contributed to advancing institutional research in economic geography. Mobilising concepts of ‘institutional configuration’, ‘institutional complementarity’ and ‘institutional work’ in relation to one another, we developed these notions by demonstrating that the institutional work of lower-level actors can leverage functional interdependencies (complementarities) on the ground to make land titles fungible as collateral in complex and ever-evolving institutional configurations. Methodologically, this study has combined an institutional analytic approach with the deep contextualisation of economic geography, by mapping the institutional configuration of the RL to identify missing complementarities and corrective strategies, while also unravelling how different scales of agency, space and time factors affect risk and introduce contingency in the institutional work of lenders. As such, the article has provided a rare empirical examination of how economic institutions are formed, function and coevolve in one specific context, adding to prior engagements with these questions in theory or in other sectors of the economy. Contributing to challenge a dominant understanding of the property-credit nexus in the nascent credit market Global South, the article has brought attention to an area that deserves more research in economic geography (Zukauskaite et al., 2017) and geography more broadly (Green, 2022).

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Supplementary material

Supplementary data for this paper are available at *Journal of Economic Geography* online.

Conflicts of Interest statement

None declared.

Authors' contributions

Shared between Dr Martina Manara and Dr Erica Pani: Conceptualisation, Methodology, Project Administration, Investigation, Analysis, Data Curation and Funding Acquisition. Writing lead: Dr Martina Manara; co-author, Dr Erica Pani.

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