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Institutions and Development: A View from Below

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Abstract

Douglass North has defined an institution as "a set of rules, compliance procedures and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principals. More generally, institutions are made up of norms organized into a system, and both norms and institutions are of a symbolic and cultural nature. They are a part of the social order of society, they govern behavior and expectations of individuals, while at the same time regulating business operations and organizational ethics. They comprise the formal and informal rules within which people and organizations interact. Recent years have seen a remarkable and exciting revival of interest in the theoretical and empirical studies of how a broad set of institutions affects growth. The focus of recent research is on exploiting 'cross-country' variation in institutional quality to identify whether a causal effect runs from institutions to growth. This paper examines institutions and development from an African perspective, focusing on applicability of these concepts from below.

Keywords: Institutions, development, economic growth, business, resource endowments, land rights, property rights, law, organizations, society, rules, morals, ethics, behavioral norms, system, politics, democracy, government bureaucracy, decision-making, policy, governance, culture, African perspectives

I. Introduction

Institutions and development are broad concepts. Institutions encapsulate *the* "rules of the game" which provide the socio-economic, market and political context in which actors/stakeholders make decisions, or they can be organizations that are typically, systems of nonmarket relations. Development entails social, economic, political and human development, where human development constitutes the foundations on which the first three concepts (social, economic and political development) are based.

Douglass North has defined an economic institution as "a set of rules, compliance procedures and moral and ethical behavioral norms designed to constrain the behavior of individuals in the interests of maximizing the wealth or utility of principals.[1] More generally, institutions are made up of norms organized into a system, and both norms and institutions are of a symbolic and cultural nature. They are a part of the social order of society, they govern behavior and expectations of individuals, while at the same time regulating business operations and organizational ethics. They comprise the formal and informal rules within which people and organizations interact.

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[1] North, D. (1981). *Structure and Change in Economic History.* New York: Norton and Co. See also, Acemoglu, D., & Johnson, S. (2005). Unbundling institution, *Journal of Political Economy, 113*(5), 949-995.

Recent years have seen a remarkable and exciting revival of interest in the theoretical and empirical studies of how a broad set of institutions affects growth.[2] The focus of recent research is on exploiting 'cross-country' variation in institutional quality to identify whether a causal effect runs from institutions to growth.

The policy implications of these findings depend on understanding the specific 'channels' through which institutions affect growth and the reasons for institutional changes or lack thereof. Pande and Udry have suggested; "the coarseness of cross-country data limits its usefulness for such research. Instead, a more fruitful research agenda is to exploit the synergies between research based on micro-data and the questions posed by the institutions and growth studies. We emphasize a research agenda on institutions which pays attention to 'de facto' rather than 'de jure' institutions and one that pays attention to how changes in resource endowments can cause individuals to change their economic behavior within a given institutional context and potentially cause the institution itself to change in the longer run."[3]

These findings are of fundamental importance since several researchers have asserted that the quality of institutions may cause poor countries and their citizens to stay poor.[4] Of course, the policy implications of these findings depend on understanding the specific channels through which institutions affect growth and the reasons for these institutional changes or the lack thereof.

We emphasize a research agenda on institutions that pays attention to how changes in resource endowments can cause individuals to change their economic behavior within a 'given' institutional context and can potentially cause the institution itself to change in the longer run. Such institutions can be categorized into state and private sector or industrial sector institutions for economic development and growth. One of the questions to ask is: be it state or private, can development institutions revitalize growth in national economies?

Thus far, research has been careful in noting the fact that institutions and economic growth influence each other.[5] The pioneer (i.e. first) and subsequent (i.e. late-comer) industrial revolutions depended on either solid or shaky institutional economic and political frameworks. Moreover, faced with the statistical challenge of isolating causal pathways, researchers have been very inventive in identifying the features of countries that are rather exogenous to the growth process, but that might influence the character of institutional developments and might serve as instrumental variables. Of

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2 See, for example, Acquah, E. et. al. (2023). Institutions and economic development; new measures and evidence, *Empirical Economics, 65*, 1693-1728, https://doi.org/10.1007/s00181-023-02395-w; Farkas, Z. (2019). The concept and coverage of institution. *Rationality and Society, 31*(1); Chang, Ha-Joon, (2011). Institutions and economic development; theory, policy and history, Cambridge: Cambridge University Press; Ferrini, L. (2012). The importance of institutions to economic development, https://www.e-ir.info/pdf/27265: Söderlund, B. (2019). Essays on trade, institutions, and growth. Ph.D. Dissertation, Stockholm School of Economics; Morselli, A. (2021). Growth and institutional changes: A historical evolution. *Brazilian Journal of Political Economy*, *41*(2), doi.org/10.1590/0101-31572021-3133.

3 Pande, R., & Christopher, U. (2005). Institutions and development; A view from below, *Center Discussion Paper* No. 928, Economic Growth Center, Yale University, New Haven. For more details, see also, Siddiqui, D. A. (2013). Institutions and economic growth: A cross-country evidence, *SSRN Electronic Journal*, www.researchgate.net/publication/339128461; Nasreen, S. et. al. (2015). Institutions, investment, and economic growth; A cross-country and panel data study. *The Singapore Economic Review*, *60*(54); Liaqat, R., Abubakar S. H. A., & Shehzadi, I. (2018). Institutions and economic growth nexus: A cross country analysis. *Bulletin of Business and Economics*, *Research Foundation for Humanity (RFH), 7*(2), 72-80.

4 See, for example, Bruinshoofd, A. (2016). Institutional quality and economic performance, https://economics.rabobank.com/publications; Perera, L. D. H., & Lee, G. H. Y. (2013). Have economic growth and institutional quality contributed to poverty and inequality in Asia? *MPRA Paper* No. 52763, https://mpra.ub.uni-muenchen.de/52763/; Acemoglu, D. & Robinson, J. A. (2008), op. cit.

5 Zhuang, J. et. al (2010). Governance and institutional quality and the links with economic growth and income inequality. *ADB Economics Working Paper Series No. 193.* Manila: ADB; Chang, Ha-Joon, (2011), op. cit; Samarasinghe, T. (2019). The relationship between institutions and economic development, *MPRA Paper No. 97755*. https://mpra.ub.uni-muenchen.de/97755/; Aghion, P., & Durlauf, S. N. (Eds.) (2005). *Handbook of economic growth.* Amsterdam: Elsevier; Jain, P. (2021). Institutions and economic development: Understanding the evidence from Indian States. New Delhi: Institute of Economic Growth; Docquier, F. (2013). Identifying the effects of institutions on economic growth, *UCL Discussion Paper, No. 2013-30*, Louvain.

course, the number of variables available as instrumental variables is limited, and their coarseness prevents serious analysis of causal mechanisms from institutions to growth. This suggests that recent research identified by research work on institutions and growth has typically been the norm.

II. Institutions matter

One important issue is the 'availability' of comparable measures of institutional quality for a large set of countries and second is the use of instrumental variable techniques to deal with the endogeneity of institutions. Of course, this is a very rich research work with a lot more debates and discussions about the suitability of empirical strategies adopted by different scholars, the validity of their assumptions on identification and the relative magnitudes of the effects of different kinds of institutions on growth outcomes.[6]

Almost without exception, most studies find a robust positive correlation between growth outcomes and the measures of institutional quality. Across countries, improvements in the quality of contracting institutions, better law enforcement, increased protection of private property rights, improvements in central government bureaucracy, and improved operation of financial sector institutions, financial markets, increased levels of democracy and higher levels of trust are all correlated with higher economic growth as evidenced by the British, continental European, US and Japanese industrial development processes since the latter part of the nineteenth century. Designed or not, water, agricultural, mining, financial, marketing and other institutions of the state exist. In justifying the creation of agricultural marketing institutions or agencies the state, for example, argued that world-wide they were the most satisfactory type of organization to provide marketing services and that the participants benefited greatly from participating in the running of these institutions.[7] In many countries of the world marketing agencies were one means of rectifying unfair business practices by countervailing the power or competition provided by middlemen (i.e. the intermediaries through whom price jolts are transmitted in an economy). Because the agricultural industry is characterized by perfect competition, naturally farmers themselves feel vulnerable in such an oligopolistic economic environment and can seek redress by setting up marketing agencies of their own. The classic form has been the (farmer) co-operatives similar to those that emerged under the control of the state-run irrigation agriculture development agencies (or state development institutions) such as the Sabi-Limpopo Authority (SLA), colonial Tribal Trust Land Development Corporation (TILCOR) and the independence Agricultural and Rural Development Agency (ARDA).[8] Although at times after Zimbabwe's independence in 1980 the influence of institutions like ARDA (TILCOR in the colonial era) appeared to be waning due to management and policy hiccups these state institutions play an important, sometimes even a dominant, role in several countries. For example, Denmark's emergence as an exporter of bacon and dairy produce in the late nineteenth century was based on co-operative marketing agencies. Similarly, in the 1920s the co-operatives founded by Western Canadian farmers wrested control of grain exporting from private merchants.[9] However, marketing institutions are primarily service or administrative institutions serving existing structures and creating organizations befitting development agencies for

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[6] Gehman, J. et al. (2016). *How institutions matter*, Alberta: Emerald Group Publishing.

[7] Nyandoro, M. (2007). Development and differentiation: The case of TILCOR/ARDA irrigation activities in Sanyati (Zimbabwe), 1939 to 2000, PhD thesis, University of Pretoria, 2007.

[8] On development institutions such as the SLA, TILCOR and ARDA, see Nyandoro, M. (2007), Development and differentiation; Bailey, W.A. (1969). *Tribal Trust Land Development Corporation Limited Information Booklet*, No. 1, Salisbury: Edinburgh Press; National Archives of Zimbabwe Records Centre, NAZ (RC), ARDA, Box 272099, Location R19.3.12.1F, File: ADA/MAR/2 Marketing – General, Confidential Correspondence: Agricultural Development Authority – Cooperative Societies in African Areas, 26 January 1973; TILCOR, (1974), *TILCOR History*, TILCOR, Internal, Government of Rhodesia; Gwerengwe, J., (1995), Sanyati Estate Corporate Plan, ARDA; Saleth R.M. & Dinar, A. (2004). *The institutional economics of water: A cross-country analysis of institutions and performance*, Massachusetts: Edward Elgar Publishing Limited.

[9] For a detailed assessment of several agricultural marketing policies in Zimbabwe and the world, see Nyandoro, M. (2007). *Development and differentiation* and Hallett, Graham, (1968). *The economics of agricultural policy*, Chapter 12, Second Edition. Oxford: Basil Blackwell.

spearheading growth.[10] While this may be true, given the scarcity of funds in Zimbabwe, parastatal institutions like ARDA can hardly justify government's huge injection of limited funds to bail them out.[11] Nevertheless, revisiting the seemingly 'dead' development institutions[12] is imperative.

III. Comparable measures of institutions

Recent research[13] has focused on using 'aggregate' measures of institutional quality and one of the strengths of this work is the broad range of such measures examined. Several studies rely on the indicators generated by the organizations whose primary job is to provide assessments of various forms of political risk or of contractual environment in various countries around the world. Several sources (e.g. Political Risk Services, Business Environment Risk Intelligence, or the Economic Intelligence Unit, the Environmental Impact Assessment Agencies, the Quality Assurance Unit, Farmer Cooperatives and Institutions, Credit and Finance Institutions) have the important advantage of being designed to allow comparison across countries. Such institutions cannot be underestimated in producing a local, regional or international development framework intended to transform economic, social or political lives of people through enhanced growth.[14] They can also be deployed to achieve social protection, and protections against exploitation and extortion.

For example, a 'protection against expropriation' score of seven from Political Risk Services is supposed to mean the same thing in any country of the world. Most of these measures relate to institutional quality as faced by businesses and individuals in the more formal urban sector. It is also the case that this literature, almost by definition, has to treat 'institutions' coarsely. The problem is that the dimension of the vector of institutions that we believe influences growth is extremely large. Since some of the dimensions are 'unobserved' (by nature or because of the number of countries is small), regressions never include this whole vector of institutions on the right-hand side.

We know that there is a wide recognition of the fact that economic performance determines the form of institutions. We find that a very small number of variables have been called upon to identify the causal effects of the wide range of institutions analyzed in recent research. The key instrumental variables are based on 'geography' (distance from the equator and the predicted trade

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[10] Nyandoro, M. (2007), op. cit.

[11] Ibid, 338.

[12] For detail on these development schemes, the institutional framework that guided their operations as well as their successes and failures, see Nyandoro, M. (2007). *Development and differentiation*; Barnett, T. (1977). *The Gezira Scheme: An illusion of development.* London: Frank Cass & Co. Ltd; Barnett, Tony, (1975), The Gezira Scheme: Production of cotton and the reproduction of underdevelopment, in Oxaal, I., Barnett, T., & Booth, D. (eds.), *Beyond the sociology of development: Economy and society in Latin America and Africa*, London: Routledge and Kegan Paul Ltd; Wells, F.A., & Warmington, W.A. (1962), *Studies in industrialization: Nigeria and the Cameroons*, London: Oxford University Press; Chambers, R. (1969), *Settlement schemes in tropical Africa: A study of organizations and development*, London: Routledge and Kegan Paul; La Anyane, S. (1963). *Ghana agriculture, its economic development from early times to the middle of the twentieth century*, Accra: Oxford University Press. Most of the large-scale (grandiose) irrigation agriculture schemes established in Africa in the 1920s and 1960s were either a failure or 'dead' due to several factors some of which were institutional. In fact, the promotion of small-scale or smallholder irrigation originated as a backlash to the poor performance of the large-scale schemes in Africa between the 1920s and 1960s. It is now generally acknowledged that these schemes were a failure. The causes of this poor performance can be explained in terms of shortcomings in the design, management, operation, efficiency, institutional flaws, equity and declining agricultural productivity of such schemes. See Nyandoro, M. (2007), op. cit; Gibbon, P. (1992). A failed agenda? African agriculture under structural adjustment with special reference to Kenya and Ghana. *The Journal of Peasant Studies, 20*(1); Scott, J. C. (1998), *Seeing like a state: How certain schemes to improve the human condition have failed*, New Haven: Yale University Press.

[13] Bruinshoofd, A. (2016), ibid; Perera & Lee (2013), ibid; Lehne, J. et. al. (2014), op. cit; Parent, O., & Zouache, A. (2012). Geography versus institutions: New perspectives on growth of Africa and the Middle East. *Journal of Institutional and Theoretical Economics, 168*(3), 488-518; Zhuang, J., et. al. (2010). Governance and institutional quality and the links with economic growth and income inequality with special reference to Asia. *ADB Working Paper Series* No. 193, Asian Development Bank; Voigt, S. (2012). How (Not) to measure institutions. *Journal of Institutional Economics, 9*(1), https://doi.org/10.1017/S1744137412000148; Jerg Gutmann, Stefan Voigt. (2022), Conceptualization and measurement of institutions. *The Routledge handbook of comparative economic systems.* London: Routledge Accessed on 08 Jan 2024 https://www.routledgehandbooks.com/doi/10.4324/9781003144366-15

[14] Nyandoro, M. (2007), op. cit.

share, oil exporters) and colonial and pre-colonial history (settler mortality, legal origin, ethnic and linguistic composition, pre-colonial population density, state antiquity).

The paucity of plausible instruments arises from the fact that there are few variables, which are important determinants of the current form of a particular institution but affect growth only through that institution. Another striking feature is that the same variable is often used in various studies as an instrument for different indices of institutions but interpreted in different ways. Consider settler mortality. It is used as an instrument for (i) protection against expropriation risks; (ii) executive constraints; (iii) measures of financial depth such as private credits; (iv) a rule of law index; and (v) the overall index of institutional quality.

As mentioned earlier, the instruments that dominate recent research are based on geography and colonial and pre-colonial history. These variables exploit long-term persistent institutional features of a country. The (iv) strategy purges the estimates of the effect of any institutions that change along the path of development, because these are clearly endogenous to the growth process. This suggests that (iv) strategy, by design, is not able to identify the consequences of institutional change for growth.

We suggest that the general approach of recent studies may not be compatible with further progress on exploring the channels through which institutions affect economic development, or on understanding how institutional change can affect growth.

IV. Coarseness of institutional measures

We find that the cross-country research has largely relied on broad indices of institutional quality.[15] One concern is that the construction of these indices requires subjective valuations of what belongs in the index. Typically, the information that underlies the indices is not fully 'public' and reflects the subjective judgments of research at the risk assessment organization. For example, the Political Risk Services (PRS) constructs the widely used ICRG (International Country Risk Guide) measures.[16] The ICRG provides several indicators, most of which rely on a combination of objective information about the country and subjective assessments of PRS analysis and their research team (different papers combine these indicators in different ways).

We have no reason to doubt the competence of those who construct the indicators and the fact that the investors are willing to pay for this information, shows that the indicators are associated with something that investors care about. However, the opacity of construction of these indicators limits open debate about the judgments.

Several other measures of institutional development used are subject to the same difficulty.[17] These include the BERI index, the Economist Intelligence Unit's indices of bureaucratic efficiency and institutional efficiency, the Freedom House democracy index, also the executive constraints, and the index of democracy (from Policy III and Policy IV).

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[15] For example, Bruinshoofd, A. (2016), op. cit.; Perera & Lee (2013), op. cit.; Lehne, J. et. al. (2014), op. cit; Masuch, K., Moshammer, E. & Pierluigi, B. (2016), op. cit.; Zhuang, J., et. al. (2010), op. cit.

[16] The ICRG model for forecasting financial, economic, and political risk was designed in 1980 by the editors of International Reports, a widely respected weekly newsletter on international finance and economics. The ICRG rating comprises 22 variables in three subcategories of risk: political, financial, and economic. A separate index is created for each of the subcategories. The Political Risk index is based on 100 points, Financial Risk on 50 points, and Economic Risk on 50 points. The total points from the three indices are divided by two, to produce the weights for inclusion in the composite country risk score. The composite scores, ranging from zero to 100, are then broken into categories from Very Low Risk (80 to 100 points) to Very High Risk (zero to 49.9 points).

[17] Acquah, E. et. al (2023), op. cit.; Samadi, A. H., & Alipourian, M. (2021). Measuring institutional quality: A review, DOI: 10.1007/978-3-030-61342-6_6; Shirley, M. M. (2012). Measuring institutions: How to be precise though vague. *Journal of Institutional Economics*, *9*(1), 31-33.

Obviously, some measures of institutional development are not subject to this concern. For example, the index of trust is based on survey responses to a specific question; readers can make their own judgment regarding the suitability of the measure.[18] A second concern relates to arbitrary choice of weights to combine the sub-indices (the most common index is an unweighted average of the indices). This makes interpreting the estimated impact of the quality of institutions and relating this estimated impact to the true effect of the underlying institutions problematic.

Two instances illustrate the empirical relevance of these limitations of the cross-country methodology that has been so popular in empirical research. First, the typical institutions regression has GDP per capita as the dependent variable. Of course, we should be at least as interested in the determinants of poverty. What can we learn by replacing GDP with a poverty measure, the head count ratio, in this canonical regression?

Certainly, there is reason for skepticism. As the institutional measures tend to focus on the urban and formal sector, we expect them to have less impact when we consider poverty, which depends particularly strongly on features of the rural and informal economy which invariably is dominated by women and to an extent child. As emphasized in multilateral positions on gender and development (GAD), the poverty of women is a primary justification for development interventionist institutions designed to improve the position of women.[19]

V. Land law

Average formal sector-based indices of institutional quality are unlikely to capture institutional quality as faced by the average person in poor countries of the developing world. Moreover, 'heterogeneous' treatment effects may be a real concern in poor countries where social, ethnic networks and patriarchy remain an important constraint on individual decision-making. Research on development institutions particularly state institutions that focus on water and irrigation agriculture, dryland agriculture and some international especially Non-Governmental Organizations (NGOs) on gender which focus on women and the girl child show that these disadvantaged people in society do not have much say in most 'development institutions'. Government policy in parts of developing societies regard women, just like children, as minors.[20] Hence, their role in institutions while important is not highly regarded in male chauvinistic and patriarchal societies. In Zimbabwe agriculture the majority of women were not independent decision makers because male heads of their households were in control of what to produce, where to market the produce as well as determined the price of farm produce although it was the women who were key producers of food, grain and other marketed farm products.[21] Men (and not women) controlled land through patriarchal systems and the rights that were bestowed on them by the state under the Zimbabwean colonial Land Tenure Act/Law of 1969.

Land was a vital resource of production without which women struggled to gain a complete foothold on the agricultural lands which they tilled. Thus, women exhibited agency in land matters, but the lack of effectiveness of female agency in Zimbabwe is that most women did not own land in their own right, and the plight of women in agriculture and land ownership is well documented. Nyandoro argues that since colonial times women in rural Zimbabwe were neither made recipients nor controllers of the land which they spent so much time tending. The inattention to gender equality

[18] For details, see, Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation? *Quarterly Journal of Economics, 112*(4), 1251-1288; Naef, Michael and Schupp, Jurgen (2009). Measuring Trust; Experiments and Surveys in Contrast and Combination, *IZA Discussion Paper* No. 4087, Institute of the Study of Labor, Bonn: Schechter, L. (2007) "Traditional Trust Measurement and the Risk Confound: An Experiment in Rural Paraguay", *Journal of Economic Behavior and Organization*, vol. 62(2), pp. 272-292.

[19] Jackson, C. (1996). Rescuing gender from the poverty trap. *World Development*, *24*(3), 489-504.

[20] Nyandoro (2007), op. cit.

[21] Ibid.

and other gender considerations specifically the issue of rights has been a thorn in the flesh for the development of women. Women have often been relegated to the role of walking long distances to fetch water, cultivate/till the land and fend for their children/family with little institutional support. The girl child and more recently the boy child have not been spared due to the absence of effective institutions to address their plight and social development. Social development influences economic development,[22] hence while development institutions like Gender Commissions in African countries have tried to bridge the gap between the social and economic development of women, girls and boys, it still has not been an easy road for these institutions. The lack of institutions or the presence of ineffective women-led institutions or organizations to fight for female rights has thus often affected women's social standing in society. However, some women have diversified their livelihoods by not merely engaging in agricultural production but have entered into non-farm (off-farm) activities (for example, artisanal mining, cross-border trade and informal marketing of wares) to sustain themselves and their children.

Typically, the measures of institutions in the cross-country research studies are based on either formal rules and procedures or perceptions of those working in the urban business sector. For rural land rights what matters is the country's community-based mechanisms as exemplified by the customary law. In African countries, what matters for rural land rights is the country's community-based mechanisms as shown by the customary law.[23]

Customary tenure arrangements, not formal sector rules, govern almost all land usage in four African countries, namely, Gambia, the Democratic Republic of Congo (formerly Zaire), Ghana and Cote d'Ivoire. The influence of the formal legal system introduced by colonial powers on land rights as experienced by households is indirect but was very direct in colonial Zimbabwe. This is not to say that the analysis of 'de jure' rights is not interesting; indeed, such an analysis is essential for understanding the importance of changing formal laws regarding property, and such changes may be an important instrument for policy.

We can observe a stark contrast between *de jure* and *de facto* property rights in these African countries. French authorities typically did not recognize land ownership by traditional chiefs. In contrast, in colonies without significant white settlement, the British policy of indirect rule included the colonists' interpretation of customary land tenure rights.

In terms of 'de jure' laws, this is reflected in a more limited recognition of customary law in French colonized countries. However, there is no close correspondence between 'legal origins' and 'de facto' land tenure rights in these four countries. In the countries colonized by France, war seems to have played a more important role in defining the security of property rights. Moreover, a central tenet of customary law was that for most part, individuals could not sell land on which they have user rights, and this remains relevant in the rural sector of all countries.[24]

Moreover, there is no clear relationship between 'average protection against expropriation' and the likelihood that a cultivator is confident of his or her control over land. While Gambia is a clear outlier in this group of four/five, categorized as having much higher protection against expropriation, use rights in some areas of Gambia are less well-established than those in Ghana (in particular, use rights are very secure in Ghana's cocoa-producing areas). Protection against

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[22] AU, (2009). African Union gender policy, REV 2 /Feb 10.

[23] For details, see, Benjaminsen, T. A. & Lund, C. (eds.) (2003). *Securing land rights in Africa*. London: Frank Cass; Byamugisha, F. (Ed.) (2014), op. cit., Byamugisha, F. (2016). Securing land tenure and easing access to land. Background paper for African transformation report 2016, www.jica.go.jp/jica-ri/publication/booksandreports.

[24] Freudenberg, M. (2000), Tenure and natural resources in Gambia, Vol. 40, University of Wisconsin-Madison, Land Tenure Center; Cotula, L. (ed.). (2007). *Changes in customary land tenure systems in Africa*, Rome: IIED

expropriation in the DRC[25] is rated very poor compared to that in Cote d'Ivoire, but tenure security seems to be quite similar in areas of both countries less affected by respective wars.

VI. Intra-country heterogeneity of land rights

Customary law has nearly full legal recognition in Gambia and none in the DRC; in Ghana and Cote d'Ivoire, it has only partial recognition. Moreover, the complexity of 'de facto' land rights hinder the interpretation of 'secure' property rights. While customary law tends to view land and resources as inalienable, property rights cannot be wholly ceded by those to whom the land has been allocated.[26] In Zimbabwe, for example, leasing and ceding of land by those allocated land is prohibited by law as all land in the country is designated state land.[27] Consequently, in none of these countries (including Zimbabwe) there is anything approaching freehold tenure common in agriculture. In Cote d'Ivoire, customary law generally permits land sales, which could indicate the existence of a more secure tenure than in most of Ghana.[28]

However, 'usufruct' rights are generally secure in most of Ghana, while the land is under cultivation (even including tree crops).[29] However, the 'usufruct' rights of a large population of non-Ivoirian migrants in Cote d'Ivoire are not secure.[30] Within any of these countries, there is a distribution of tenure security; hence, the usefulness of summarizing that 'distribution' with a single index is sensitive to the context.

VII. Interlinkage of political and contractual institutions

A common distinction in the cross-country institutions research has been between political institutions (as measured by, say, expropriation risk) and the institutions, which determine contractual form (as measured by, say legal origins).

Of course, the real world is much more complicated, and this distinction is especially treacherous when considering land rights in Africa. The indigenous tenure rights are implemented and arbitrated by the authorities (chiefs, lineage heads, elders etc.), whose legitimacy is typically drawn from a local political process. Their authority over land allocation is political power since it enables them to grant or refuse a farmer the right to cultivate or to settle. By allowing or forbidding newcomers to settle and by fitting them, from the outset, into a network of alliances, the land chief regulates the process where a local community is constituted.[31] In rural Zimbabwe, some beneficiaries of land are those with chiefly and political connections.[32] Those with links with the state, were often guaranteed the 'right' to use 'vacant', unoccupied or untenanted land as well as obtained preferential access to facilities from loan, credit and financial institutions.[33]

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[25] See, Moyroud, C. & Katanga, J. (2002), Colton exploration in Eastern Democratic Republic of Congo. In, Jeremy, L., & Kathryn, S. (Eds.), *In scarcity and surfeit*; *The ecology of Africa's conflicts.* African Center for Technology Studies, Pretoria. SA: The Institute for Security Studies.

[26] See for details, Bruce, J. W., & Migot-Adholla, S. E. (1994). Searching for land tenure security in Africa. The World Bank & Kendall Hunt; Obeng-Odoom, F. (2012). Land reforms in Africa: Theory, practice and outcome. *Habitat International*, *36*(1), 161-170.

[27] Nyandoro, M. (2007). Development and differentiation.

[28] Kone, M. (2002), *Gaining rights of access to land in West-Central Cote Ivoire.* London: International Institute for Environment and Development; Nara, B. B., Lengoiboni, M., & Zevenbergen, J. (2021). Assessing customary land rights and tenure security variations of smallholder farmers in northwest Ghana. *Land Use Policy*, *104.*

[29] Amanor, K. (1999). *Global restructuring and land rights in Ghana.* Uppsala: Nordiska Afrikainstutet. Also, Aryeetey, E., Harrigan, J., & Nisanke, M. (2003). *Economic reforms in Ghana; The miracle and the mirage.* Oxford: James Currey and Woeli Publishers; Austin, G. (2004). *Labor, land and capital in Ghana.* Rochester NY: University of Rochester Press.

[30] Chauveau, Jean-Piere (2000). Question fonciere et construction nationale et Coe d'Ivoire. Les Enjeux Silencieux d'un Coup d'état, *Politique Africaine*, 17, 94-125

[31] Raynaud, C., Delville, P. L., & Gregoire, E. (1997). *Societies and nature in the Sahel.* London: Routledge.

[32] Nyandoro, M. (2007).

[33] Ibid.

The specific property rights as experienced by farmers often depend on both how the political office is allocated, and the land allocation powers given to the politician. Thus, in Africa the political and contractual institutions seem to be intertwined for land processes.[34]

This suggests heterogeneity in the effects of institutions across countries. The extraordinary diversity of institutional practices across and within countries places natural constraints on the usefulness of cross-country studies for understanding the specific channels through which institutions affect economic outcomes, and how these institutions, in turn, respond to economic, demographic, political and social forces.

VIII. Institutional variations within a country

One of the most fruitful areas of research has been program evaluation in poor countries – these typically combine household or regional level data with detailed information on the implementation of a particular institution or policy in the country to estimate its economic impact. Relative to cross-country studies, an important advantage of within-country studies is the relative homogeneity of the institutional and constitutional setting across the units of analysis. This potentially helps to disentangle the economic impact of institutions from unobserved heterogeneity across the units of analysis.

Moreover, concerns of heterogeneous treatment effects may be more limited in the context of a single country. However, the scope for identifying credible instruments for particular institutions is much greater in cases of within-country studies. The reason is that institutional change is typically implemented at the country (or sub-country) level.

This opens the possibility of exploiting specific features of how institutional change was implemented across regions in a country or across different population groups to obtain the instruments for the institutional variable of interest. Hence, using any single country's experience with institutional change to identify the instruments for a cross-country analysis will typically not yield an instrument with sufficient power across many countries. Hence the reliance on relatively crude instruments such as settler mortality.

A common approach is to use panel data, which spans years both before and after the policy change and to explain cross-sectional variations in the extent of institutional changes. Such variations may arise due to timing differences in policy implementation across different regions within the country or because the extent of institutional change was explicitly related to underlying economic features of the regions.

We found that to identify the economic impact of land titling, it is common to exploit the passage of land titling or registration programs which take land claims out of the realm of informal lineage, community land ownership or informal 'squatter rights' and making them legal, formal and individual.[35]

These studies span numerous countries and different economic settings. While the economic validity of any single study may have limits, it is certainly possible to compare across studies in different regions to identify generalizable lessons. Looking across several studies, suggests the following findings: (i) Land titling and registration typically increase agricultural productivity and

[34] Udry, C., & Goldstein, M. (2004). *Gender, power and agricultural investment in Ghana.* New Haven, CT; Yale University: Cotula, L. (ed.). (2007), op. cit. See also, Lund, C. & Boone, C. (2013). Land politics in Africa; Constituting authority over territory, property and persons, *Africa*, *83*(special issue 1), 1-13.
[35] For details, see, Binswanger, H., Deninger, K.. & Feder, G. (1995), Power, distortions, revolt and reforms in agricultural land relations, in Behrman, J., & Srinivasan, T. N. (Eds.). *Handbook of development economics*, *III*. Amsterdam: Elsevier Science: Arunada, B., Fabbri, M., & Faure, M. (2021). Land tilting and litigation, *BSE Working Paper* No. 1271, Barcelona School of Economics; Besley, T., & Burgess. R. (2004). Can labor regulation hinder economic performance: Evidence from India. *Quarterly Journal of Economics, 119*(1), 91-134.

farm investments.[36] The extent of this increase depends on the details of the titling programs and pre-existing land tenure system; (ii) There is a weaker but positive effect on credit. The impact of titling on credit was very limited in situations with less developed credit markets; (iii) there is some evidence that land value rises, but this remains very preliminary.

Certainly, the endogenous uptake of land titles presents a serious concern for empirical evaluations and not all studies address this concern adequately. However, the potential for using the institutional details of land titling interventions to identify credible instruments for exposure to land titling far exceeds that available in the context of a cross-section study.

A good example is Field and Torero who analyze the value to a squatter household in Peru of the increases in tenure security associated with obtaining a property title as measured by his/her labor supply response. A national titling program in Peru issued formal property titles over a five-year period to more than 1.2 million urban households.[37] Field and Torero use two sources of variation in program influence to isolate the effects of titling; the neighborhood program timing and program impact based on prior household ownership status. In particular, staggered regional program timing enables a comparison of households in neighborhoods already reached by the program with households in neighborhoods not yet reached.

These facts are combined with data on past and future title recipients (collected halfway through the titling program) to identify a natural set of comparison groups composed of treated and yet-to-be–treated households.[38] A comparison of labor supply behavior of these two sets of households would reflect the causal effect of land titling.

Banerjee *et al*[39] have used similar empirical studies in the context of India, as Duflo and Banerjee in relation to lending programs.[40] Of course, the absence of a unifying institutional environment implies that such studies at cross-country level could not be undertaken.

The fact that the economic effect of land titles depends on the existence of complementary institutions, the details of the titling programs and the pre-existing land tenure systems points to the importance of accounting for heterogeneous effects. It seems that an important and relatively unexplored area for research is to use within country studies a better understanding of the sources of such heterogeneity. We also note that the equity effects of titling remain very controversial; so far, there has been little research effectively identifying the long-run relationship between titling and the distribution of wealth and income.

IX. Variation within institution

A given institution can provide a variety of incentives to different individuals, depending on their endowments. This makes it possible to use data on the behavior of individuals within a given institutional setting to explore the consequences of an institution for behavior and potentially of changing factor endowments for institutional form.

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[36] Where there was legal title (freehold title) and assured property rights in Southern Rhodesia (colonial Zimbabwe) especially by farmers in the Native Purchase Areas the farmers there tended to be more agriculturally productive and relatively successful compared to the communal area (reserve) farmers. See Green, E., & Nyandoro, M. (2023). Property rights and labour relations: Explaining the relative success of native purchase area farmers in Southern Rhodesia, 1930-1965. *Journal of Southern African Studies*, Forthcoming.

[37] For details, see: Field, E., & Torero, M. (2004). Do property titles increase credit access among the urban poor from a nationwide titling program. Harvard University Paper, Mimeo; Field, E. (2007). Entitled to work; Urban property rights and labour supply in Peru. *The Quarterly Journal of Economics*, *122*(4), 1561-1602; Dube, R. (April 2015). To have & to hold: Property titles at risk in Peru. *Land Lines*, Lincoln Institute of Land Policy.

[38] Field, E., & Torero, M. (2004), op. cit.

[39] Banerjee, A., Gerter, P., & Ghatak, M. (2002), Empowerment and efficient: Tenancy reform in West Bengal. *Journal of Political Economy, 110*(2), 239-280; Nara, B. B., Lengoiboni, M., & Zevenbergen, J. (2021), op. cit.

[40] Duflo, E., & Banerjee, A. (2014). Do firms want to borrow more; Testing credit constraints using a directed lending program. *Review of Economic Studies*, *81,* 572-607.

Over 60 percent of the Ghanaian population is in the agricultural sector and customary law mostly governs land distribution.[41] Customary law regards land as a common resource of production. Individual ownership is recognized for standing crops, but not for the soil itself. Rather, ultimate title over land is vested in corporate groups, in particular, in the lineage and individuals gain access to land via membership in such groups.

There can be multiple potential claimants to any particular plot. In such cases, the competing claims are negotiated, and certain members of the community are recognized as having the power to arbitrate such conflicts. Land rights in the study area are complex, ambiguous and highly negotiable.[42]

Of course, understanding the persistence of this land tenure regime requires an understanding of the local political economy under which it exists and of the role that this land tenure system serves beyond its 'effect' on investment incentives. Historically, an important source of resistance to titling has been the fear that landlessness would result.

An important rationale for the allocation of land use rights via membership in the matrilineage is redistribution.[43] Limited access to credit markets remains pervasive in rural Ghana and, so land redistribution is seen as essential to prevent long-term poverty.

An important mandate of local political leaders is to prevent landlessness. The flexible land tenure system has successfully prevented the emergence of a landless class. Given the imperfections in other factor markets, the efficiency gains from equalizing land ownership per capita across households can potentially offset some of the loss associated with reduced fallowing due to insecurity of tenure rights.

Lack of panel data that tracks households over very long periods prevents us from directly examining the degree of reallocation of land in response to demographic shocks. Nevertheless, clearly there are gains associated with this kind of redistribution in response to demographic shocks, and perhaps a more diffuse gain associated with the lack of any landless class.

In the cross-section, we see little correlation between associations of matrilineage land and the demographic composition of households. The only strong correlations we find are that households with older and more politically powerful heads have more land. In the case of Zimbabwe, such household heads have acquired more land through kinship networks, unilateral seizure of land and extending their cultivation beyond designated limits by the state (that is, 'freedom' or *madiro* ploughing).[44] There is little evidence of important differences in living standards as household demographics change; per capita expenditures decline weakly with household size and strongly with the ratio of children in the household.

[41] Austin, G. (2004), op. cit.
[42] Goldstein, M., & Udry, C. (2008). The profits of power: Land rights and agricultural investment in Ghana. *Journal of Political Economy*, *116*(6), 981-1022.
[43] Ibid. See also, Owoo, N. S. & Boakye-Yiadom, L. (2015). The gender dimension of the effects of land tenure security on agricultural productivity. *Journal of International Development*, *27*, 917-928: Goldman, M. J. et. al. (2016). Controlling land they call their own: Access and women's empowerment in Northern Tanzania. *Journal of Peasant Studies*, *43*(4), 777-797: Daley, E., & Englert, B. (2010). Securing land rights for women. *Journal of Eastern African Studies*, *4*(1), 91-113.
[44] Africans in Sanyati (and other parts of Zimbabwe), in opposition to the Native Land Husbandry Act (NLHA), extended their cultivation in a process known locally as 'madiro'. This was the self-allocation of land to boost their prospects for accumulation. 'Madiro' (in Shona) was the practice of land-grabbing, irrespective of whether it was in restricted areas (e.g. grazing lots, river valleys) or not. This is also called 'freedom ploughing' i.e. ploughing wherever one wished in flagrant disregard of NLHA regulations. In state corridors, 'madiro' cultivators were labelled 'illegal cultivators'. See Nyandoro, M. (2012), op. cit.

While local people claim that the allocation of land by the *abusua* leadership is driven by one's need, any member of the *abusua* who needs land is entitled to some for cultivation.[45] The determination of 'need', not surprisingly, is often contentious. The claim was also made that the act of leaving a plot fallow would demonstrate a lack of sufficient need and cast doubt on one's rights to the plot. If this is true, then it must be the case where 'need' is private information, and the extent of one's need is signaled by choices with respect to fallowing. The act of leaving a piece of land lying fallow in Zimbabwe, in contrast, was however a way of allowing the land to regenerate its soil fertility and was not due to lack of need of land as in Ghana.

It is apparent, there is far from complete information about individuals' resources in rural Ghana. Most adults in rural Ghana, as in Zimbabwe, engage in non-farm activities to complement their income from agriculture. Information about the income generated from non-farm activities is closely held; even spouses are unlikely to know the details of one's income and expenditures.[46]

We find that the leadership uses a cultivation requirement to construct an incentive-compatible mechanism that separates most of the poor from most of the rich. The leadership offers land to those who will cultivate it without leaving it fallow. The poor typically find the tradeoff worthwhile and accept the land.[47]

The tradeoff is clear; any increases in the cultivation requirements increase the amount of land available for the leader to cultivate, but also increases the number of the poor who are not allocated land and hence the probability that the leader will be penalized. His choice is guided by balancing these conflicting objectives.

This model of land allocation has features that correspond to both the informal accounts of tenure insecurity and to the patterns of investment behavior observed in empirical studies. This is consistent with the idea of a cultivation requirement imposed as a way of distinguishing the poor from the rich.

These results suggest that increasing population density has affected the economic wellbeing of non-office holders more than that of the office holders. In addition, the gap between the education, area cultivated, household size and per capita expenditure of officeholders and the rest of the population increased with the availability of land in the matrilineage.[48]

Apparently, the flexible system of allocating temporary 'usufruct' rights through a political process at the matrilineage level has served a re-allocative purpose, helping avoid the emergence of a class of destitute landless people in the villages. We also find that the efficiency cost of this system of insurance is apparently increasing with population density.

Moreover, in those matrilineages in which *abusua* land is under severe population pressure and have shorter fallow periods, a larger proportion of cultivated land is obtained through commercial fixed-rent and sharecropping contracts.

But the officeholders, on the other hand, do not respond to population pressure by moving towards cultivating commercially obtained land, because they use their control over the land allocation process to mitigate the consequences of that pressure. The results suggest that population pressure is inducing actions that may have the long-term consequences of transforming the land tenure system of the area.

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[45] Goldstein, M., & Udry, C. (2008), op. cit.; Gyapong, A. Y. (2021). Commodification of family lands and the changing dynamics of access in Ghana. *Third World Quarterly, 42*(6), 1233-1251; Peters, P. E. (2013). Conflicts over land and threats to customary tenure in Africa. *African Affairs, 112* (449), 543–562.

[46] For details, see, Glaeser., et al. (2004). Do Institutions cause growth? *Journal of Economic Growth, 9*(3), 271-303: Goldstein, M. and Udry, C. (2008), op. cit; Nyandoro, Mark (2007), op. cit.

[47] Berry, S. (2001). *Chiefs know their boundaries: Essays on property, power and the past in Asante,* 1896-1996. Oxford: Heinemann; Gyapong, A. Y. (2021), op. cit.; Peters, P. E. (2013), op. cit.

[48] Goldman, M. J. et. al. (2016), op. cit.; Owoo, N. S. & Boakye-Yiadom, L. (2015), op. cit.

X. Emerging conclusions

Gross correlations between institutional development and growth observed in cross-section data have provided a persuasive case that long-run growth is faster in countries that have higher quality contracting institutions, better law enforcement, increased protection of private property rights, improved central government bureaucracy, smoother operating formal sector financial markets, increased levels of democracy and higher levels of trust.

Recent research also suggests that understanding the channels of 'influence' and, why such extreme variations in institutional quality persist are the questions of central importance. Of course, the scope of using cross-country data for identifying the channels of influence is limited. The measurement of 'institutions' at the country level is necessarily 'coarse' and also obscures important dimensions of heterogeneity.

Even more important, there are very few plausible sources of 'exogenous' variations in country-level institutions that can serve to identify the causal effects of institutions on growth. It is this fact that most severely limits the range of questions, which can be addressed. We suggest that due consideration should be given to the appropriate unit of analysis when considering the relationships between institutions, economic activity and growth. In this context, we refer to the country-specific policies that implement institutional changes and not continuities.

Exploiting within-country variation in recent studies can help make progress on these controversial issues. Exploiting within-country variation implies a focus on a more homogenous environment. It is often possible to exploit features of the policy implementation processes to obtain instruments, which can help isolate the effects of a specific institution, be it agricultural, financial, economic, social or political. The concept and practice of institutions which can be applied to human organizations and its relationship to development is important to study from the perspective of the humanities and social sciences.

A given institutional setting can provide a rich variety of incentives to different individuals, depending on their economic, social or political position. Furthermore, a close examination of individual actions may help us understand how institutional change is initiated in economic environments facing changing economic and demographic pressures.

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