Why Nations Succeed: Connecting Entrepreneurial Ecosystems and Industrialization to New Institutional Theory

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Abstract

The central argument in this paper is that economic development needs both institutional reform and the emergence of an entrepreneurial society. Stressed in much of the recent literature, political institutions provide incentives in the form of property rights. However, entrepreneurship will not flourish if these institutional improvements do not go hand in hand with support systems for the individual entrepreneur at the local level. By exploring the connections between institutions and entrepreneurial ecosystems, the analysis provides for a micro-foundation of how institutional reform may lead to economic development.

Key Words: New Institutionalism, Economic Development, Entrepreneurial Ecosystems.

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Introduction

In their epic work *Why Nations Fail*, Daron Acemoglu and James Robinson provide an encyclopedic analysis of 5000 years of human history to argue that inclusive institutions are the root cause of economic development (Acemoglu and Robinson, 2012). In their theory, political systems play a key role in providing secure property rights, which in turn create incentive structures that foster economic progress. The book is a popular version of the argument made empirically in the seminal paper (Acemoglu et al., 2001) that shows the primacy of institutions over geography as the cause of economic prosperity. The theoretical foundations of *Why Nations Fail* can be found in Acemoglu et al. (2005) that summarized much of the authors' work following their AER (2001) paper.

Why Nations Fail is part of a broader revolution called *New Institutional Economics (NIE)* approach that analyses the effects of political institutions on economic outcomes. In work that dates back to the early 1980s, Douglass North stresses social structures as the cornerstone for economic prosperity. In his equally epic *Understanding the Process of Economic Change*, building on the work of North, Wallis, and Weingast, he documents 'good' social structures as moving from a natural state, through limited access societies, to open societies (North, 2005). Whereas the former two rely on rent seeking by power elites, the latter societies are characterised by competition both economically as well as politically. Combining this with Acemoglu and Robinson's work, the line of argument is that political and social structures create secure property rights, which in turn result in open societies by creating better entry conditions for entrepreneurs and political organizations and efficiency enhancing market based competition.

However, the way in which entrepreneurship develops when countries leave behind a limited access order of the natural state is treated as a black box in much of the NIE literature. Often it is simply assumed that secure property rights in themselves create incentives for entry of entrepreneurs through a simple process of opportunity recognition and creative destruction. Survival of entrepreneurs is supposed to be determined by individual exogenously 'drawn' productivity, so that only profitable firms stay in the market. However, recent insights in entrepreneurial ecosystems argue that such individual notions of entrepreneurship do not explain the large variation in entrepreneurial outcomes across countries. This literature argues that individual entrepreneurs need to be supported by an enabling ecosystem to become and stay successful. We cannot understand the success of Google, Uber, and Apple without considering the dynamics of Silicon Valley, nor can we understand the rise of Israeli and Chilean entrepreneurs without taking account of the deeper entrepreneurial institutional environment in which they operate.

The argument in this paper is that to understand how political institutions result in economic development, we need to know how property rights affect the *environment* of the individual entrepreneur, probably more so than understanding how these property rights secure individual command over resources and revenues. To this end, we connect NIE to the emerging literature of entrepreneurial ecosystems to explore the connections. By doing so, we also shed light on why political reform and dynamics towards open societies may fail to have economic payoffs when it fails to create a supporting environment for entrepreneurs. The argument is that certain forms of political reform leave behind structural holes that inhibit the entrepreneurial support environment to function as a system with network effects. A key contribution of the paper is the empirical connection of a *Political Institutions (PIN)* index to entrepreneurship. We measure political stability by using the political institutions database constructed by Bill Keefer for the World Bank. In addition, we introduce the *Entrepreneurship* index. This index combines the new business creation density index from the World Bank Entrepreneurship Survey, the ease of doing business index and the access to finance and investment opportunities scores from the Heritage Foundation.

In the next section, we introduce the building blocks of a conceptual model that connects political institutions to entrepreneurial ecosystems. In Section 3 we present our theory of ecosystem dynamics as a result of political change. Section 4 presents the empirical results on the role of entrepreneurial ecosystems as a moderator for economic development by using a simple structural equation model to analyse the moderation effects of entrepreneurial ecosystems. Section 5 discusses briefly these findings in a case study of Tanzania on how current political economy factors and the current shift in political inclusion may influence the (future) policy and business creation and expansion environment.

Institutions as a fundamental cause: Building blocks

Before getting deeper in the theoretical building blocks that connect institutions to economic outcomes, Figure 1 introduces the central mechanisms. At the center is the key mechanism of Acemoglu et al. (2005) that connects institutions to economic outcomes. Their argument is that *de facto* political power (the parties that have real power) translates in the *de jure* political power (constitutional system, political competition and rules). In turn, *de jure* political power shapes economic institutions that govern economic transactions (property rights, competition policy, regional integration, etc.). The argument in Acemoglu et al. (2001) is that past institutions (the colonial origins) are persistent and shape current political and therefore economic institutions. In a broader setting, we can think of all legacy effects to shape political power including cultural attributes (say, Confucianism in China), ideology (State involvement in past and current Russia), and social construction (the European Union as an answer to war in Europe).

The novel part of this paper is to connect this institutionalist perspective to entrepreneurship theory to say more about the exact mechanisms through which institutions shape industrialization and economic development. To do this, we connect economic institutions to the emergence of entrepreneurial ecosystems. We make use of the theory of entrepreneurial ecosystems (Audretsch, 2007) to argue that ambitious entrepreneurship through new entry shapes belief systems and therefore culture. Ambitious entrepreneurship then changes the *de facto* balance political power which has in turn effects on economic institutions, setting in motion the dynamics of economic development. Note that in this paper we interpret the term industrialization loosely as economic activity by local entrepreneurs.

Legacy and *de facto* political power

Legacy dictates ruling political elites, in much of the literature identified as 'the winning coalition'. Douglass North organises *de facto* political power in three categories: the natural state (primitive social order), limited access societies, and open access societies. All political constructs can be seen as intentional social constructions that are an answer to endemic violence in a Hobbesian 'world of all against all'. The primitive social order arising in the natural state is that of clans and tribes that provide some protection against endemic violence. In terms of social construction concepts, clan leaders as political entities are a 'declaration' of common intent to reduce the level of uncertainty by providing hierarchical structure that fosters coordination.

The move to the political structures of limited access organization is an answer to the proliferation of clan based groups and war between these groups. To avoid constant conflict between groups, the group leaders have an incentive to form a winning coalition that has command over violence (the army) for which it can use taxation. In the work of North, as well as Acemoglu and Robinson, the shape of the winning coalition is a trade-off between individual rents and command of the total population. The smaller the winning coalition, the higher the individual rents but the lower the control over the total population. Larger winning coalitions arise because of new groups that need to be controlled within the coalition often in combination with a declining ability of the members of the winning coalition to extract rents from excluded fractions.

The move to open access societies can happen through revolt of the excluded masses or by an evolutionary process in which it becomes optimal for the winning coalition to move to a constitutionally ruled society. Focusing on the latter, over time individual rents evaporate because of the inclusion of outside groups. In addition, relations within the winning coalition become less strong and less reciprocal, calling for a demand for formal protection of property rights.[1] In later stage limited access societies informal property right or formal ones overseen by a discretionary legal system may preserve a temporary balance between the member of the ruling elite. However, over time it becomes increasingly difficult to lock out members of the excluded masses from those property rights. Hence, at some tipping point, when property is secured -in terms of companies, capital abroad, superior educated offspring- the ruling coalition members may find it optimal to extend political participation universally, moving to an society of open access. Clearly 'doorstep' conditions -that is what North calls them- of moving from limited access to open access societies are of key importance. We devote the last subsection to them.

De jure political institutions and competition

Limited access societies are characterised by political system components that sustain the power of the winning coalition. Examples are absence of term limits for veto players, bonus seats for parties that win the elections, and de facto media bans for opposition parties. But even when a formal political system and constitutions seem to mirror that of developed economies, the absence of the rule of law still gives the ruling elite substantial leverage over opposition parties. There are many examples of arrests of opposition leaders that block them from running, election fraud, and voter intimidation.

In recent years, there has been much research into the economics of political competition as well as into the effects of political systems on economic outcomes. Much of this progress is associated with the work of Torsten Persson and Guido Tabellini. In *Pillars of Prosperity: The Political Economics of Prosperity Clusters*, Besley and Persson summarize much of the insights of their academic work, which includes two leading textbooks on political economics (Besley and Persson, 2011). The theory textbook *Political Economics* has at the center stage how constitutional setups shape political

[1] In the case of Africa, revolt against colonial rule often has been the cause for systems change. Many of the ruling elites have their roots in colonial struggle, clear examples are Robert Mugabe in Zambia, Jomo Kenyatta in Kenya and Julius Nyerere in Tanzania. Even when the process of forming political elites is less than evolutionary, the later to be discussed doorstep condition may apply to these cases as well.

competition (Persson and Tabellini, 2000). The idea behind this is that political competition limits the options for rent seeking, which in turn improves economic conditions. Based on median voter logic and two party political competition, Persson and Tabellini show the effects constitutional setups on political competition. For example, when members of assemblies are elected through first past the post district elections, this creates incentives to focus rents on swing districts where ideological preferences and the dominance of a single party are low. Another example is that presidential systems create competition between the executive and parliament through checks and balances, which may increase overall political efficiency. Persson and Tabellini (2000) empirically analyze the connection between constitutions and economic outcomes. They show that constitutions that increase political competitions also improve economic outcomes.

Many developing countries currently are dealing with a change in *de facto* political power distribution that affects the *de jure* political system. Examples are how to deal with term limits in presidential systems. Of the 98 presidential systems in Africa since independence up to 1990, only six included term limits in the constitution (AfroBarometer, 2015). Of the 64 constitutions amended between 1990 and 2010, 49 included term limits. However, there are frequent attempts to circumvent term limits, in 2015 and 2016 these discussions flagged in Rwanda, Burundi, Democratic Republic of Congo and Uganda. In 2016, claims that ruling parties have used their position to influence election outcomes are heard in Tanzania and Zambia.

Key to the theory that underlies *Why Nations Fail* is that 'good' political institutions translate into good economic institutions. New entries into the winning coalition only want to trade their support in return for secure property rights and secure political representation, which reinforce each other. For example, in limited access societies in East Africa, 'Asians' originating from India have dominated trade in close relationship with indigenous ruling elites. The increased trade in natural resources in post-colonial times triggered much infrastructure investment supported by China's development agencies and State Owned Enterprises (SOEs). To include these new interest in the winning coalition triggers a demand for property rights in those investments and erodes the claim of first time members of the winning coalitions on the juridical system enforcing those claims. Another example is that the growing importance of rural elites erodes the position of the urban elites, which then leads to substantial decentralization of political decision making.[2]

Although there are many (substantiated) claims that good politics leads to good economics, the mechanism through which this happens is restricted to the cementing of property rights as cornerstone for economic incentives. In itself these links are complex enough. For example, secure property rights may give rise to monopoly power, reducing economic efficiency. On the other hand, property rights provide incentives for disruptive innovation which reduces the ability of monopolist to exploit their market power. However, so far less attention is given to the economic system characteristics that arise because of better political institutions and how these economic system components stimulate new economic activities. To this we turn next.

Economic institutions to support entrepreneurship

Figure 1 shows two mechanisms through which political institutions affect entrepreneurial activity. A first mechanism is entry of new businesses in the economy. A better political climate and rule of law provides better incentives for people to start a business. Probably equally important is the shift from rent seeking to value creation. In his seminal paper, Baumol (1990) argued, on the basis of historical illustrations, that the way in which the entrepreneur acts at a given place and time depends heavily on the rules of the game. When political competition reduces rents, this lowers the incentive of rent seeking relative to value creating economic activities that require entrepreneurship.

[2] In the 2000s, the World Bank has embarked on a large scale programme in many African countries to support decentralization in public sector governance. Although this programme openly was motivated by efficiency arguments to connect better to local preferences, the political effects clearly have been less grip of ruling elites on the sources of political power. Interestingly, currently some countries including Tanzania are returning to centralized public funding of local initiatives.

A second mechanism is that competition increases selection of the right type of firms by forcing exits of unproductive firms. There is substantial empirical evidence that the potential benefits of more productive and innovation driven enterprises to the economy and society at large are much greater in the long term.

However, starting up these type of enterprises is also much more challenging, and ideally requires the involvement of a range of stakeholders beyond the individual entrepreneurs, such as risk capital providers, large corporate partners, and knowledge institutions. The entrepreneurial ecosystems approach has become increasingly popular in recent years to describe the interdependent set of actors that is governed in such a way that it enables entrepreneurial action (Stam, 2015). This approach identifies a set of individual elements or conditions —such as leadership, culture, capital markets, and customers— that combine in complex ways. In isolation, each element is conducive to high-growth entrepreneurship but in itself insufficient to sustain it (Isenberg, 2010). Governments may play an enabling role in supporting the ecosystem, but it is the entrepreneurs themselves who are at the heart of the system (Feld, 2012).

Although not always clearly demarcated, the most common level of analysis in the entrepreneurial ecosystem literature are urban areas. Glaeser and Steinberg (2016) discuss three ways in which densely populated urban areas can promote regime change and democratization. First of all since urbanization enhances the power of organised action, which may enable uprisings. Second, urbanization may increase demand for democracy, in particular when trade and innovation play an important role in the local ecosystem. When negative social interactions are more dominant in the urban environment, such as crime and the spread of contagious diseases, populations will most likely favor more dictatorial regimes. Third, urbanization may promote so-called civic capital, which refers to the social skills and connections of citizens that may improve the quality of their government (Glaeser and Steinberg, 2016).

In his influential Harvard Business Review article, Daniel Isenberg (2010) provides evidence of entrepreneurial success stories from several unlikely places such as Rwanda and Medellin, Colombia. While many local governments share the ambition of becoming another Silicon Valley, the most effective practices increasingly seem to come from locations where resources —as well as legal frameworks, transparent governance, and democratic values— may be scarce (Isenberg 2010). While on the one hand market failures and system failures may actually create new entrepreneurial opportunities, successful entrepreneurs, on the other hand may also contribute to the improvement of political institutions —directly, as Mo Ibrahim's endeavors for good governance clearly illustrate, or indirectly, by changing social mobility, norms, belief systems, and eventually *de facto* power.

Empirical Analysis

The central argument in this paper is that political reform and the improvement of economic institutions needs to go together with actual entrepreneurship and support for starting business. To provide evidence for this mechanism, we collect data from different sources. As argued in the introduction, we do not rely on a narrow set of indicators but instead construct standardized indicators to make the results more robust.

To construct the political institutions indicator we use the political institutions database constructed by Beck and Keefer that covers institutional variables of the period 1994-2012.[3] Our *PIN* variable uses three key elements of this dataset: Checks and Balances, Polarization, and Stabilization. Checks and Balances measure the power of veto players, polarization the relative power of the executive party, and stability measures changes in executive power. For these variables we split the sample in 1994-2002 (period 1) and 2003-2012 (period 2) take the average values and standardize these. Taking the average of the three standardized variables given the *PIN* variable.

[3] For a detailed description see: Beck, Thorsten; Clarke, George; Groff, Alberto; Keefer, Philip, and Walsh, Patrick (2001), 'New Tools in Comparative Political Economy: The Database of Political Institutions', *World Bank Economic Review,* 15(1), 165-176.

The construct the entrepreneurship *Eship* variable we basically follow the same procedure. From the World Bank entrepreneurship database we use the rate of new business establishments, from the ease of doing business dataset we use the overall variable, from the Heritage Foundation we use the overall support variable that measures issues like business finance and investment environment to capture the entrepreneurial ecosystem. For the first period we take 2002-2008 and for the second period 2008-2014. As we are interested in the connection from political institutions to create the business environment, the variables have a moving window. As dependent variable we use the log of growth rate of the economy for the periods 2002-2008 and 2008-2014. As controls we use GDP per capita at PPP for the year 2000 (to capture starting positions), openness to trade (which for developing countries may capture the resource curse effect), regional dummies and income class dummies.

We include only low, low middle and high middle income class countries according to the World Bank classification. Taking account of data availability across the various datasets, we are left with a dataset of 68 countries.[4] We are interested how politics and entrepreneurship are congruent, so we introduce interaction terms to measure complementarity. We construct interaction terms for the first periods, the second period and the change between these periods of the underlying indices. We use simple OLS regression. Results are in Table 1.

As a striking first result, countries that have relatively good institutions in 1994-2002 have lower growth in the 2002-2008 period, controlled for regions and income class. This is evidence of the earlier dominance of the 'greasing the wheels' effect in which corruption arising from rent seeking activities favors economic growth. However, we see that this effect disappears in period 2. We see that entrepreneurial activity and ecosystem have no correlation with economic growth. In addition, the inclusion of interaction effects within the periods does not alter these results.

[4] In a very small number of cases, the averaging of standardized values of multiple variables does not take into account missing values of some of them, so as to not lose too many observations.

Table 1: Political Institutions, Entrepreneurship and Growth.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PIN period 1	-0.18*	-0.23**					
	[-1.78]	[-2.07]					
Eship period 1	-0.04	-0.02					
	[-0.38]	[-0.19]					
Interaction p1		-0.12					
		[-1.08]					
PIN period 2			-0.15	-0.15			
			[-1.09]	[-1.08]			
Eship period 2			0.13	0.13			
			[0.82]	[0.81]			
Interaction p2				-0.01			
				[-0.09]			
PIN change					-0.17	-0.23**	-0.22*
					[-1.46]	[-2.00]	[-1.75]
Eship change					-0.06	-0.1	0.12
					[-0.51]	[-0.85]	[0.94]
Interaction change						0.25**	0.34**
						[2.09]	[2.53]
Observations	67	67	68	68	68	68	68
Adjusted R2	0.42	0.42	0.07	0.06	0.25	0.30	0.17

Note: Columns (1) and (2) Growth p1; Columns (3), (4) and (7) Growth p2; Columns (5) and (6) Growth change. All regressions include regional and income class dummies, GDP per capita PPP 2000, Openness as controls. Standardized beta coefficients; t statistics in parentheses; * p<0.10, ** p<0.05, *** p<0.01.

The most dramatic effect is in Column (6). From Column (5) we can observe that improvement in political institutions and entrepreneurial activity in themselves do not generate higher growth levels. But this is radically different when we include the interaction term: countries that improve political institutions and entrepreneurship in tandem have much higher growth levels. More strikingly, countries that only reform political are actually worse off that the countries that do not, if they not also reform entrepreneurship conditions. Column (7) shows the quite trivial conclusion that this congruence effect is concentrated in period two of 2008-2014.

Discussion: Doorstep conditions for growth in Tanzania.

We have seen in the previous section that economic growth is correlated to improving political institutions and entrepreneurship when these move in tandem. For discussion at the workshop, it is interesting to identify so called doorstep conditions for economic development using the theories explored and see how these conditions apply to Tanzania. Using political economy theory as well as entrepreneurial ecosystems, we identify the following doorstep conditions. We offer some elements of what we know of the Tanzanian situation, but much is open for discussion.

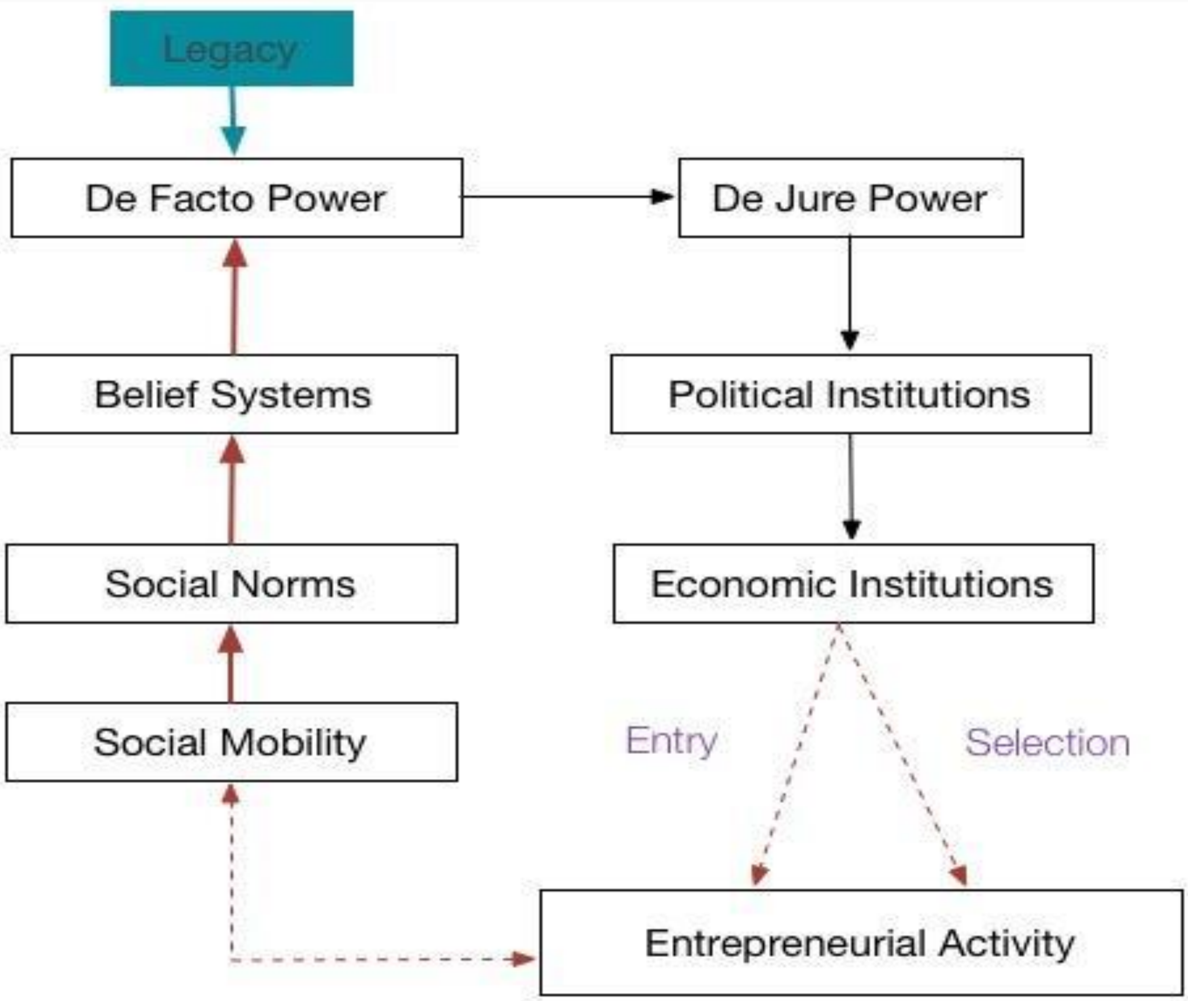
1. **Political power and widening of the winning coalition**. Political power cannot be taken for granted for the long serving ruling party. Clearly, the political competition between the ruling CCM party and the CHADEMA led coalition has never been that fierce. Some claim that when CHADEMA would have been unified in terms of a joint candidate, this would have influenced the election result. In addition, the rural roots of the current president and claimed absence of '*mtando'* together with the rise of Chinese business interests over Asian interest put much pressure on preserving the winning coalition. As the leader of the opposition comes from CCM, this has de facto split the winning coalition towards open access political competition.

2. **Constitutional reform**. Constitutional reform limits the power of the power of the executive. Initially, following the scandals of the Kikwete administration, the Constitutional Reform Commission produced a new constitution that would limit the powers of the president. For the moment, this process is in disarray as a return to party money political is deemed to be not effective in combatting the number one enemy of corruption. In addition, the strong move to centralization of public finances will centralize more powers in the hands on the executive. However, the process of serious debate of curbing the hands of the executive has started, and it is to be seen whether president Magufuli moves towards control of power or actually centralizes this more towards a new winning coalition. So far, the signals are mixed.
3. **Rule of law among the elites**. As argued by North, an important step is when exchange between the elites becomes impersonal and subject to the rule of law. Again, signals are mixed, however, the recent government has put forward a large number of corruption cases against member of the elite class itself. Whether this is a sincere attempt to apply the rule of law to the elite or whether it is simply has the aim of shifting the balance of power within the winning coalition remains to be seen. In addition, there are signs that business class elites are included in the ruling law among the elites. For example, the Azam company was included in a probe of tax evasion, however, the effect of the solution of giving exclusive powers in sugar production to this group can be judged as massaging the business pains by the current government.
4. **The emergence of urban entrepreneurial ecosystems**. Key to political reform and the build-up of entrepreneurial ecosystem will be entrepreneurship in urban regions. Tanzania’s major cities have been transformed into entrepreneurial hubs driven by a blossoming service economy. But many entrepreneurs are getting frustrated by the current effect of government policies. Much can be said about curbing spending on conferences and travel, but this hits especially the

entrepreneurial class in the large cities where support for the government is low. It remains to be seen whether the new entrepreneurial class can be stopped as a force that will transform Tanzania's political institutions.

Again, these issues are open to debate. What we know from the analysis in this paper is that political reform including the fight against rent seeking and corruption will only result in new jobs, industrialization, and entrepreneurship if it is able to develop and new entrepreneurial generation.

Figure 1



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