Developmental Rent Management Analysis

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ABSTRACT

This paper constructs a conceptual framework for the analysis of rents and rent management, which is referred to as a Developmental Rent Management Analysis (DRMA). The central utilisation of the DRMA framework is to help observe how the three rent management factors—politics, institutions, and industry organisation—affect the structure of incentives and pressure that ensure firms' effort towards technical learning, upgrading, and innovation. This is based on the premise that successful rent management primarily depends on formal and informal political and institutional arrangements to produce incentives and pressures for upgrading. Furthermore, while rents are created for a variety of purposes, rent outcomes, whether good or bad, depend on a set of political, institutional, and market conditions that, in many cases, take place informally. One of the key objectives of the DRMA framework, therefore, is to understand this informality and how politics and institutions are configured. In essence, DRMA enables a broader understanding of the various factors at play—political, institutional, and economic—in the process of development, including its technological dimension. DRMA therefore allows for a fuller and more complete understanding of how and why developing countries succeed or fail to industrialise and to catch up.

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1.1. Introduction

The literature on rents and rent-seeking tends to narrowly depict these phenomena as inherently bad and growth-reducing (Buchanan, Tollison, & Tullock, 1980; Krueger, 1998; Posner, 1975; Tullock, 1967), with rarely any attention to the potential of these phenomena to contribute to positive developmental outcomes. More problematic is the claim, which is widely spread by donor agencies, that development failures in poor countries are due to the pervasive nature of rents and rent-seeking (Coolidge & Rose-Ackerman, 1999; Mauro, 1997). For example, donors' conditionalities in many poor countries are often meant to curb rents and rent-seeking on grounds that they necessarily undermine development outcomes.

Nonetheless, an emerging body of literature is beginning to challenge this narrow neoclassical analysis on rents and rent-seeking. Research on the topic by institutional economists such as Khan and Jomo (2000b), North et. al. (2007), Chang and Cheema (2002), and Booth and Golooba-Mutebi (2012) provide evidences and insights that certain type of rents can be value-enhancing and rent seeking can produce good outcomes. "In a world where learning and innovation have to be rewarded, distributive conflicts dealt with, where incentives have to be created to deal with asymmetric information and where scarce natural resources have to be conserved, many types of rents are socially desirable" (Khan & Jomo, 2000a, p. 8). An illustrative example of this emerging thought is the Africa Power and Politics Programme, which introduced the concept of "developmental patrimonialism" (Booth & Golooba-Mutebi, 2012, p. 1). In the case study of Rwanda, research from this programme asserts that:

> The interest and ability of the ruling elite to impose a centralised management of the rents which are an unavoidable feature of early capitalism…have provided Rwanda with the

"early-stage venture capitalism" it needed to achieve economic recovery post-1994 and to maintain respectable rates of investment and socio-economic progress under otherwise unfavourable conditions during the last decade. (Booth & Golooba-Mutebi, 2012, p. 1)

As rent and rent-seeking may be socially desirable and value-enhancing, Khan (2009) suggests that a more general approach to utilize them is to incorporate political and institutional variables to explain, first, the types of rights and rents which are created as a result of rent-seeking and, second, the configuration of how this new rent creates the incentives and pressure to increase firms' and workers' effort to develop. This paper is situated within this emerging literature. It argues that rents are better understood as a policy instrument that could either be damaging or developmental (for a complete review of the debate, see Ngo (2013)) depending on the rent management mechanism, which is defined as the configuration of politics, institutions, and industry organisation[1] that produce the rent outcomes.

As an additional observation, economic and industrial development can largely be viewed as a process of technological "catch up," in which firms in developing countries learn to master new technologies of production already in use in more advanced economies (Warren, 2007). From this perspective, this paper focuses largely on the political and economic relationship between the state and its industrial sector,[2] prefacing the economic growth in a development context.

Based on the preceding insights, this paper aims to construct a conceptual analytical framework for the analysis of rents and rent management. This framework is called

[1] In this paper, industry organisation is defined as the structure of and boundaries between the firms and the market.

[2] This paper defines the industrial sector broadly to include manufacturing and servicing industries.

Developmental Rent Management Analysis (DRMA). DRMA provides analytical tools to analyse the larger political, institutional, and organisational dynamics that are at work and how they deliver productive rent outcomes without the presumption of an autonomous and capable guiding state. Rent management emerges from this discussion as a critical analytical instrument that explains the configuration of three important factors - politics, institutions, and industry organisation - as the fundamental source of long-term economic growth for developing countries. To do so, this paper asks, "How does the configuration of politics, institutions, and industry organisation, create, allocate, reallocate, contest or destroy rents in developing countries?" In other words, how are rents managed in reality? Note that 'management' is used here as a term describing the outcome of a potentially complex interplay of forces and does not imply that there is an agency 'managing' these rents.

This framework is based on a fundamental assertion that no one political or institutional arrangement provides exclusive access to successful rent management and developmental outcomes. In reality, a successful rent management strategy is specific to the political and institutional context of a country and its political economy.

In section 1.2, the DRMA framework is introduced and its value substantiated in detail. DRMA involves four analytical steps. The first step identifies four important types of rent: learning rents, Schumpeterian rents (also known as technology rents or innovation rents), monopoly rents, and redistributive rents. This list is by no means exhaustive, but is appropriate for this rent management analysis. The second step is the assessment of the potential incentives and effects of each rent, given the political and institutional structures of the developing country. Step three analyses the configuration of politics, institutions, and industry organisations that produces specific rent outcomes. Step four examines the transformation of the firms and their industries as a consequence of this structure of rents. These steps are used to assess a number of quite different rent management mechanisms that could be identified during economic reform in a developing country. It explains the high or low performance in industries and the political, institutional, and industrial organization that underpin the differences in their performance. This paper frequently refers to the Vietnamese experience to provide illustrative examples of the DRMA framework.

1.2. Developmental Rent Management Analysis

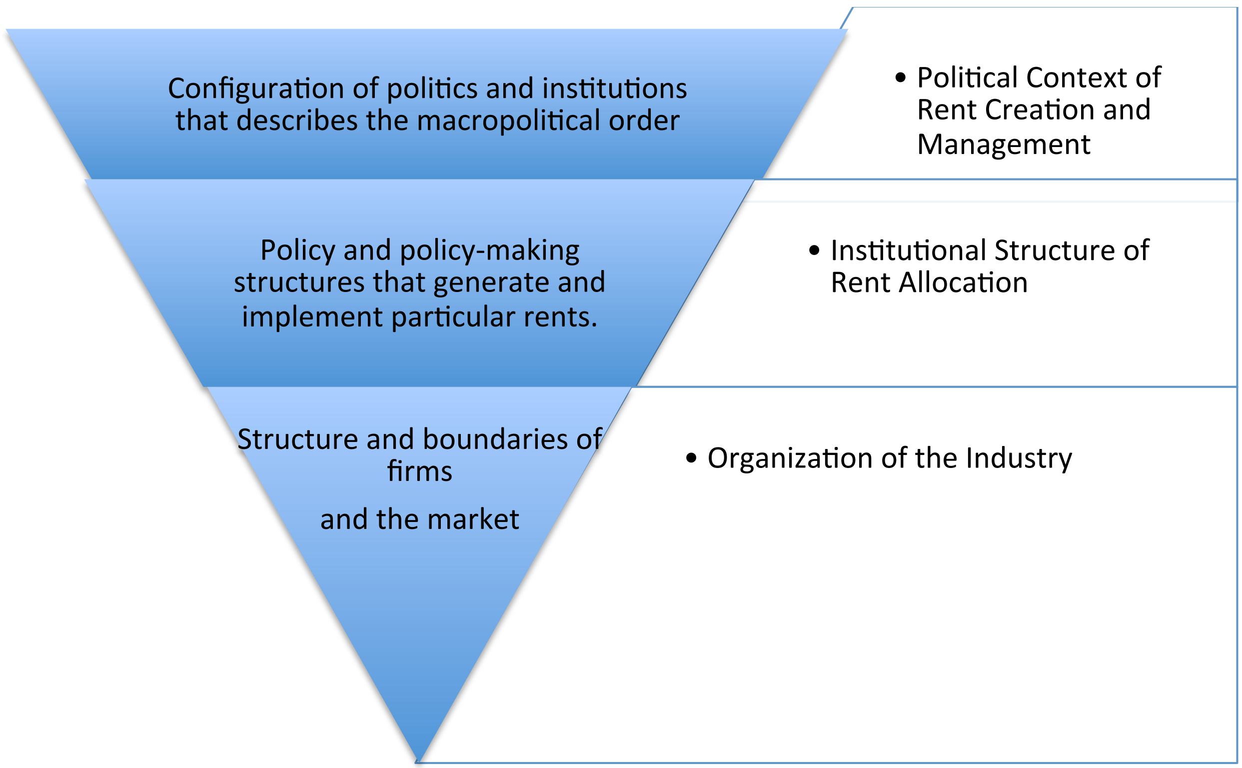
The developmental rent management analysis (DRMA) uses the four analytical steps detailed above. For clarity, the steps are organised in order. The first step identifies the type of rent involved in the case study. The second step establishes the potential incentives and effects created by the rent. The third step analyses the configuration of politics, institutions, and industry organisations that produce the actual rent outcomes. This configuration is known as the rent configuration created by the rent management system, or rent management mechanism[3]. Here, the discussion involves the most substantive analysis of the DRMA framework because it investigates the political, institutional, and industry structures and how they interact to create the actual rents and the conditions under which they are available to different players. The fourth step looks at how firms and industries transform as a result. Figure 0.1 and Figure 0.2 map the steps in order, and which together constitute the DRMA framework.

[3] These two phrases are used interchangeably throughout this thesis.

Figure 0.1: The DRMA Framework

Analytically, step three requires the most important and substantive analysis within the DRMA framework, and covers three levels (see Figure 0.2). The highest level analyses the configuration of politics and institutions that describes the macro-political order; namely, the political context of rent creation and management. The second level assesses the policy and policymaking structure that generates and implements particular rents; namely, the institutional structure of rent allocation. The third level studies the structure of and boundaries between the firms and the market that create incentives and pressures for efforts; and looks at the implications of the organisation of the industry.

Figure 0.2: Analytical Hierarchy the of DRMA Framework: Transformations Leading to Rent Outcomes



1.2.1. Step 1: Types of Rent

This author contends that value-enhancing rents address certain market failures that developing countries encounter, especially failures that affect the process of learning and innovation. In this context, learning and innovation rents are arguably the most important policy instruments for development, while the effects of monopoly and redistributive rents can vary greatly depending on the circumstances. This section offers a rough illustration of the four different types of rents. For a comprehensive discussion on different types of rents, see Mushtaq Khan (2000).

1.2.1.1. Learning rents

In theory, learning rents provide the financing to enable learning-by-doing. This in turn has two important dimensions. The first is to enhance technical capability through learning-by-doing. The second involves the improvement of organisational capability. Conceptually, learning rents are rents that are given *ex ante* to target learning and technological progress in a specific industry or sector, though they could in principle also be allocated *ex post* as a prize (Khan & Blankenburg, 2009). Learning involves not just copying the operation of existing technologies, but also significant amounts of adaptation to local conditions. In other words, learning can involve a substantial amount of innovation to adapt technical and organizational capabilities to the technology. The success and effectiveness of learning can in principle be measured in terms of outcomes like productivity growth or exports and in some developmental states learning rents were allocated with conditions for specified achievements within a certain period of time. Learning rents can be intended and unintended, depending on whether they are the product of specific learning, technology acquisition or industrial policies. Intended learning rents are created by policy makers who intentionally create rents to induce technological adoption. Thus, it is a rent created for learning, though the outcome of the rent is not necessarily guaranteed. As such, whether this rent will in fact operate as rent for learning is an analytical issue that must be examined in terms of the institutional conditions and proven in terms of the empirical evidence.

Unintended learning rents are also important because rents that had other intentions can sometimes also have unexpected learning outcomes. In order words, the outcome of the rent (the learning effect) can emerge from an accidental configuration of factors. For example, a rent may be created for redistributive purposes to assist individuals in a particular region or firms of a particular type. However, if this rent emerges in a configuration of political and institutional factors that induce the recipients to use the opportunity to enhance their organizational and technical capabilities, the result may be the achievement of learning effects. We would describe these as unintended learning rents. Generally, any type of rent can have many different effects, regardless of the purpose of its creation.

1.2.1.2. Schumpeterian, or innovation, rents

Schumpeterian rents reward innovation, often in the form of tax breaks, subsidies, patent protection, and so on. Innovating firms have an advantage over their competitors because they often develop a better product or a less expensive way of manufacturing an existing product, which traditional firms cannot instantly copy. Innovative firms can thus earn a rent. This rent is generated because, with new innovations, firms will either have a cost or quality advantage over competitors, which allows them to earn a higher return compared to the next best alternative (Hausmann & Rodrik, 2003). If an innovation can be rapidly copied and, thus, become easily produced and sold, innovators can be discouraged to innovate.

There are three important properties of effective innovation rents. First, the Schumpeterian rent signals the possibility of a significant prize for future innovators, providing them an incentive to innovate. To do so, the state may protect innovators through intellectual property rights that provide additional rents for profit-making. Second, the time horizon of protection is an important factor for ensuring desirable outcomes of Schumpeterian rents. Khan (2000) argues that, on the one hand, because the process of innovation takes time, is risky, and requires effort and investment, Schumpeterian rents should ensure sufficient super-profits to induce innovative activities, and therefore, they should not be removed too quickly. On the other hand, such rents should also not be allocated for too long, beyond the necessity of inducing further innovations, because their survival has costs for consumers and after a point innovation rents can become indistinguishable from monopolistic or redistributive rents (Khan, 2000). Finally, Schumpeterian rent can either be ex post, such as patent-based rents, or ex ante, such as university research grants, the most effective variant again depends on the characteristics of the innovation and the institutional context in which such rents are managed.

1.2.1.3. Monopoly rents

Monopoly rents for firms emerge as a result of entry barriers, which allow firms operating in protected markets to charge higher prices for their products. Entry barriers can be natural, which is when the technology of production involves large economies of scale, such that a single large producer can undercut newcomers. Entry barriers can also be state-made, based on exclusive protective rights or licensing for a particular producer. In the neoclassical assertion, the creation of monopoly power leads to a general reduction in welfare (Abbott & Brady, 1991). Khan (2000), however, contends that, "even in the extreme case of monopoly rents created by government protectionism to favour cronies, their dynamic effects are not always clear cut" (p. 31). In some cases, there may be genuine economies of scale in these industries, and super-profits may create incentives for greater investment, which could counter, to some extent, the static inefficiency and X-inefficiency effects[4] of the monopoly. In other cases, monopoly rents may indeed signal lost output and growth opportunities (Khan, 2000). It could be difficult to

[4] The efficiency due to higher costs under monopolies is sometimes described as X-inefficiency, to distinguish it from the allocative inefficiency, which relates to the static analysis.

distinguish Schumpeterian rents from monopoly rents because innovators often enjoy a *temporary* monopolistic position in the market for their innovation, which ends when the protection is removed or when the patent has expired. Conversely, monopolists often try to justify their monopoly on grounds of innovation and investment. As long as monopolistic power is monitored and temporary, Schumpeterian rents could create incentives for technical progress and new innovation. As a result, the overall effects of monopolies vary from case to case and depend on specific technologies, sectors, and firms (Khan, 2000).

1.2.1.4. Redistributive rents

Unlike learning or Schumpeterian rents, redistributive rents serve various diversified purposes other than developmental goals. The purpose of the rent is to redistribute benefits usually on political grounds. For example, redistributive rents can be an important tool for maintaining political stability. The growth implications of the overall structure of redistributive rent can be either positive or negative. Khan (2000) points out that the economic effect of redistributive rents can have two negative components. First, redistribution can have direct welfare implications because transfers may affect incentives and investible resources in sectors that are effectively taxed. Second, the rent seeking for redistributive rents can create political instability if the allocation of redistributive rents is continuously changing as a result.

However, Khan (2000) also points out that redistributive rent may positively provide the benefited individuals or groups with the incentives and opportunities to utilise the rent for economically productive activities. In addition, investment decisions depend on political stability, which could be achieved through redistribution. In some countries, transfers were associated with rapid capital accumulation, development, and growth, such as in the case of Malaysia. In other countries, conversely, the result has been large-scale theft and transfer of resources to foreign banks by cronies and politicians.

Because redistributive rent underpins both early capitalist accumulation and the political processes of maintaining order and legitimacy, the implication of redistributive rent – either negative or positive – is much more complex than the analysis suggested within the neoclassical literature of rents, and rent-seeking. In addition, the pattern of redistribution illustrates how well competing groups are organised and work together or otherwise. As a result, rent-seeking activities that result in redistribution and transfers can explain why transfers could be growth-enhancing rather than growth-reducing. Consequently, it is the pattern of economic and political distribution that matters much more for our analysis than the fact that transfers take place.

1.2.1.5. Unintentional effects of rents

An important distinction between the neoclassical and the heterodox approach to rents and rent-seeking is the fact that neoclassical economists argues that all rents are damaging regardless of their outcome (Rajagopalan, 1996). Heterodox economists, such as Khan (2000), however, maintains that the reason a rent is created may have nothing to do with how it eventually operates, and thus rents and rent-seeking open up space for the possibility of both value-enhancing and value-reducing rents (see Ngo (2013) for a complete review of the debate).

A rent may create accidental effects if it operates differently from its intended purpose. As such, whether a rent gives rise to certain effects that may have little to do with the *intention* of the rent. For example, the World Trade Organization's Multi-Fibre Arrangement (MFA) was originally created to protect the textile and garment manufacturing in the United States. However, it had an unintended effect of encouraging learning in developing countries through its increased demand of textile and garment exports from countries that lacked these capabilities. Therefore, the MFA created unintentional learning rents for some countries.

Many rents have unintentional effects that are extremely important. For example, a monopoly rent could cause accidental effects if, instead of providing monopolistic power to firms, it operates as a learning rent. The unintended effects, especially the productive ones, often emerge from the configuration of politics, institutions, market competition and the existing capability of the firm, which provide the incentive and pressure for learning and innovation. Many redistributive rents may also have learning benefits that can support growth-enhancing outcomes in the industrial sector.

1.2.2. Step 2: Potential Incentives and Effects Derived From the Rent

To assess the second element, the DRMA analysis seeks to identify what potential incentives and effects the rent actually induced, regardless of the rent's initial purpose. In other words, what was the effect of the rent despite the original intention of its creation? While knowing the reasons that were declared by interested parties at the creation of the rent is important, it is unnecessary in the analysis of the effects of the rent in this step because the question under consideration is the effect of a particular rent under specific institutional and political conditions. Did the rent offer a firm incentives and opportunities as well as compulsions, for example, in terms of time or financial resources to acquire a new technology, to learn how to use it, and to set up the production for a new product with the new technology; or did it motivate unproductive activities?

One important aspect to remember is that although a rent is created with a specific development purpose, it may produce a number of different incentives or potential usages that are completely different, if not contradictory, to the original intention. Second, the incentive created by a rent is context-specific because whether a firm will expand investment to acquire new learning and technology is dependent on whether it foresees a profit possibility from investment expansion and whether it is under pressure to use the opportunity productively. Third, in most cases, rents can potentially create either positive or negative incentives for the recipients. For example, a particular rent could provide incentives to spend resources to keep the rent without doing anything productive – i.e., to boost learning or to invest in research and development that could lead to new innovations. The actual outcome will depend on the wider institutional, political and market conditions that determine the incentives and compulsions of the firms receiving the rent.

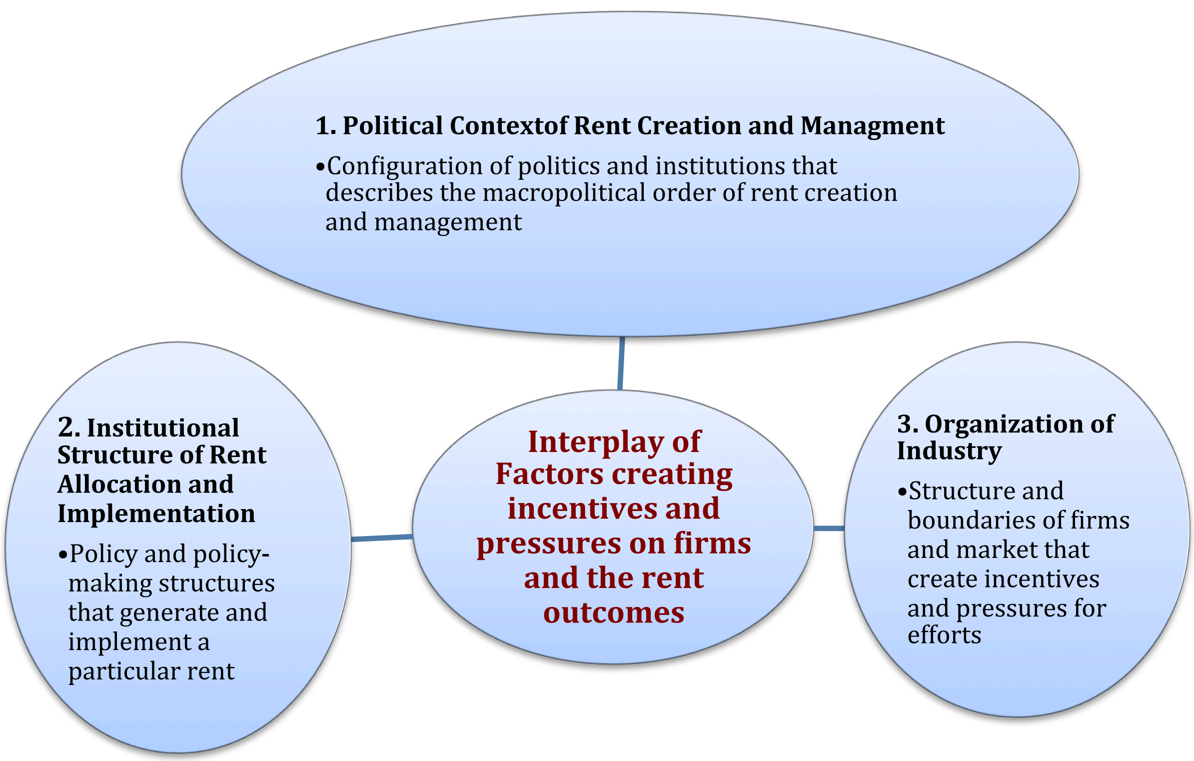
1.2.3. Step 3: The Configuration of Rent Management

The third analytical step is the most involved element of the analysis of the DRMA framework. It examines the configuration of factors that describes the 'rent management' of the particular rent being examined. Here, the rent management mechanism is defined as the ways in which politics, institutions, and the organization of an industry are structured both formally and informally, and how they actually interact to create certain sets of incentives and pressures for rent-receiving firms or individuals, for instance to upgrade their technical and organisational capability. In a development context, rent management is usually the outcome of a set of institutional and political pushes and pulls; the term "configuration" refers to this. Therefore, the rent management mechanism defined here is not a system that necessarily is under the control and monitoring of the state and its agencies as suggested by Chang (1999) and Chang and Cheema (2002), but instead is a *dynamic configuration* involving formal and informal institutions and organisations that influence firms and political actors to generate either growth-reducing or growth-enhancing outcomes. In the context of technological adoption and capability building, this outcome could be either a new technical and organisational capability or redistribution of rents toward unproductive activities, such as asset speculation.

The configuration of the relevant institutions and organisations analysed in step 3 looks at three separate questions. The first involves the creation of particular categories of rents. The second looks at the allocation of rents, and the third looks at the factors determining the allocation, continuation and withdrawal of these rents. Based on this information, the analysis assesses the relevant institutions and organisations and how they collectively determine both the types of rents that exist (in step 1), the incentives that the rent induces (in step 2), the conditions of their allocation, continuation and withdrawal (in step 3), and the actual outcomes (which will be discussed in step 4).

In step 3, the rent management analysis evaluates the internal and external incentives and pressures that are placed on firms that directly or indirectly influence their industrial performance and therefore the outcomes eventually associated with the rent (described in short as the rent outcome). The incentives and pressures discussed here do not necessarily stem from the state, but could come from the configuration of a number of forces; for instance, market competition, the time horizon available to make a profit under alternative strategies, and the market supply and demand conditions for the product produced by the firm. The incentives and pressures for performance are critical factors because if a rent is created without effective incentives and pressures for capability enhancement, there is no guarantee that the rent recipients will pursue high-effort strategies for acquiring technical and organizational capabilities or engaging in innovation, or new production. Figure 0.3 outlines the three levels of the rent management analysis in a development context.

Figure 0.3: Illustrative Map for Rent Management Analysis



Rent management analysis first inquires into the macro-political context of rent creation and management (balloon #1 in Figure 0.3). The second level of analysis evaluates the institutional structures that generate and implement the particular rent (balloon #2). The third level of the analytical hierarchy looks at the interaction between the firm and the market and the market structure (balloon #3). These levels of analysis are now discussed in detail in the following sections.

1.2.3.1. Political context of rent creation and management

As mentioned earlier, DRMA inquires into various mechanisms and how they interact to generate incentives and pressure for performance. Implicit and explicit in this DRMA framework is how politics plays a central role in rent management. This is the first level of analysis. This role is critical for three important reasons. First, politics matters because it is through political processes that economic institutions are adjusted, specific policy selections are chosen and performance is subsequently monitored (Moon & Prasad, 1998). Second, by mobilising powerful groups in society, political organisations compete for rents or attempt to affect the management of rents by forming coalitions with other political organisations. Third, as institutions and politics shape rent policies and firms' performance, the pressures created by rent-seeking, policy choices and firms' performances can also trigger political feedback, reshuffle political alliances, or induce new institutional design and rent policies.

For these reasons, it is essential to assess how the formal and informal political organisations are structured, and the ways in which they create and allocate rents. In essence, we need to understand two separate issues about the political conditions of a developing country. The first issue that we must understand is how political organisations are actually structured, both formally and informally. The second issue that we must understand is how they formally and informally interact to create and manage rents. This knowledge will provide the crucial understanding of the political dynamics embedded in the political economy of an industry and an economy.

Most importantly, the political context of any rent management system describes the specific configuration of the politics and institutions that make up the macro-political order in which rent creation and allocation are being organized. In this context, politics and institutions interact in a number of ways. On the one hand, the balance of political forces determines the ways in which formal and informal institutions operate to create and manage rents. On the other hand, political mobilizations and struggles can change the political order and this can transform the ways in which rent-managing institutions operate. Therefore, the first task for an analysis of rent management is to describe the configuration of politics and institutions that describes the macro-political order.

1.2.3.2. Institutional structure of rent allocation and implementation

The second level of analysis is to understand the policy and policy-making structure that generates and enforces particular rents. In this paper, institutions are defined as rules, both formal and informal, such as those which shape the authority structures of firms, or the rules allocating public resources to them both formally and informally (Moon & Prasad, 1998). Institutional rules may be formal, for instance, legal codes and statutes, or informal in that the allocation and management of resources are based on political bargaining, norms and group values. Although it is not a focal point of this analysis, it should be noted that cultural elements and ideology could also impact on both economic and political institutions. For example, elements of the Confucian tradition reflect deeply in many East Asian countries' culture, as well as formal and informal social, economic, and political norms.

Institutions and institutional structures matter a great deal for the rent-seeking processes because they determine how rents are formally and informally created. They also set the rules for rent-seeking by determining who can seek rents and how the rent-seeking processes work. Here, the institutional conditions that are relevant to the rent management analysis are the formal and informal rules through which rents are actually created and implemented. For example, the analysis may include:

- What are the policy instruments through which rents are created?
- How does the government intervene in the credit market, in land allocation, and in tax policies to promote industrialization and how do these policies create rents?
- How significant are these rents and how are they allocated?
- What are the formal and informal rules of allocation, continuation and management?

Answers to these types of questions provide information for the analysis of the formal and informal institutions that create and implement rent policies.

In understanding the structure of rent allocation, the informal rules are critical, perhaps more so than the formal rules, because in developing countries, many of the rules that compel actual performance and efforts are informally agreed upon among individuals and groups based on a set of informal values. Here, the analysis seeks to know:

- What are the informal rules or agreements between the interests that are involved in the creation and maintenance of particular rents?
- How do these rules and agreements come into place, and how are they implemented?

It should be noted that the question of how particular informal rules *emerge* is very different from the question of how they *operate* in practice, and those are different from the question of the *effects* of these informal rules or norms on the efficacy of particular rents. Our focus will be on operation and effects.

1.2.3.3. Organisation of industry

Thus far, we have described the analysis of the political and institutional mechanisms that create and implement rents within the DRMA framework. Subsequently, DRMA must also consider the organisation of the industry, which is defined as the structure of and boundaries between the firms and the markets that create incentives and pressures for effort. This is the third level of analysis. In this context, the description of the organisation of an industry includes looking at factors such as (1) market structure, (2) structure of firm ownership, (3) the type of technology needed for industrialization and (4) the initial capability of the firms and workers in that sector since this can determine the feasibility of learning particular technologies, skills and expertise. Of particular importance is the degree of competition between firms that determines the disciplining pressures of the market.

Market structure matters because the effort put into learning or innovation with any given rent allocation depends on the competitive environment in which the firm finds itself, which in turn depends on factors like the size of the firm in relation to the market, the minimum efficient scale of production; market concentration[5]; the uniqueness of the products[6]; entry barriers[7]; and the degree of vertical integration.[8]

[5] Market structure is defined as the market power of firms measured by market shares.

On the one hand, the level of competition in both domestic and international markets could support or inhibit investments and efforts to achieve new technical skills and technology. Similarly, changes in the international and domestic market structures, for instance, contraction in demand for goods, could provide new opportunities or constraints for industries. For example, the global financial crisis in 2008 caused a large-scale recession in the developed world, which in turn severely slowed growth in the Asian economies because of weakened international demand for consumer goods. Strategies for investment and learning that may have been viable in a growing international market may turn out to be unviable in the new context. In essence, these three factors – institution, politics, and industrial organisation – do not operate independently but interact with one another, and jointly determine rent outcomes. Furthermore, the impact of each of these factors on its own cannot be meaningfully assessed.

The organization of the industry also has to take into account the structure of firm ownership, whether a firm is public, private, or jointly owned by public and private owners. When a firm acquires a formal rent, it usually makes certain commitments for performance because the rent was very likely meant to help it overcome certain constraints in achieving capabilities, upgrading, or innovation. The structure of firm ownership has important implications for the acquisition of rents and the capability and incentives of the firm to deliver on its commitments For instance, in the late 1990s, large Vietnamese State Owned Enterprises (SOEs), especially general corporations (CG) received most of the rents devised for industrial upgrading, while there were very limited rents created for the private sector. In addition, the Vietnamese government was also more active in channelling foreign contracts and joint ventures

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[6] The uniqueness of products relates to the level of product differentiation.
[7] Entry barriers are those that place potential entrants at a disadvantage.
[8] Vertical integration is the extent of the upstream-to-downstream integration of production.

with foreign investors to large SOEs. In this case, the rent management involved the interaction between SOEs and the state in a (restricted) market economy. Hence, the type of firm ownership matters a great deal in the allocation, implementation and management of the rent.

In addition to the market structure and types of firm ownership, the type of technology required for upgrading and its level of sophistication, matched with the firms and workers' learning abilities, also matter a great deal. As Lall (2004) points out, the process of gaining technological mastery in a new setting is not instantaneous, costless, or automatic, even if the technology is well diffused elsewhere. Lall asserts:

> The learning process is highly technology specific since technologies differ in their learning requirements. Some technologies are more embodied in equipment while others have greater tacit elements. Process technologies (like chemicals) are more embodied than engineering technologies (machinery or automobiles), and demand different (often less) effort. Capabilities built up in one activity are not easily transferable to another. Different technologies involve different breadth of skills and knowledge, some needing a narrow range of specialization and others a wide range (Lall, 2004, p. 12).

Because technology transfer and upgrading can only occur where there is successful identification of the right type of technology, which a country is capable of learning and absorbing, choosing the appropriate type of technology to adopt is particularly crucial. Here, the selection of inappropriate technology may have economic and social costs, and it would slow the process of ramping up capabilities. For example, a technology that is becoming out-dated may cause a developing country to lose its competitive advantage over its competitors. However, attempting to adapt a more sophisticated technology, which does not match with the learning capacity of the firms and the workers, could also be wasteful. In this context, the initial technological capabilities of firms determine the most appropriate technologies for adoption. As a consequence, a major task of DRMA is to identify the type of technology available, and to assess the level of technological capability of the firm and how such capability fits into the process of technological upgrading in each of the sectors.

1.2.3.4. International institutions and agreements

Within the DRMA framework, international institutions, along with the home country's commitment and privileges to its various bilateral trade agreements (BTAs) and its World Trade Organization (WTO) membership, can play critical roles in rent management. This is because while globalisation opens unprecedented opportunities for countries to engage in the world economy, it poses profound challenges to developing countries' rent strategies by raising the cost of implementing rent policies and reducing the space for devising industrial or rent policies at national levels. For instance, intellectual property restricts the use of knowledge, and thus raises the cost of innovation (Stiglitz, 2008). In the context of globalisation and integration, trade agreements, which are forms of formal international institutions, have drastically changed the nature of rent policy in developing countries over the last three decades. For late developers, the policy options for industrialisation have been curtailed by various trade obligations and these have curtailed the policy instruments (rent strategies) that could stimulate learning and innovation.

This is in contrast with the Asian Tigers' industrial experience. In the 1960s, 1970s, and 1980s, a number of East Asian countries heavily utilised rent policies in the form of subsidies as a major instrument of their industrial strategy. The use of subsidies to target new learning and technological upgrading was widespread. Governments in these countries, such as Taiwan and South Korea, targeted the development of certain industries and products through the supervision of the Industrial Development Bureau, a unit of the Ministry of Economic Affairs in Taiwan and the Economic Planning Board in South Korea. Such an option would be deemed illegal under the WTO today.

Another example of a subsidy is the localisation requirement[9], which had been used by both the Vietnamese and Chinese governments before they became members of the WTO. After Vietnam's accession to the WTO, local content requirements were not permitted, and thus are no longer a policy option for Vietnam and other late developing countries. While China continues to succeed in using its market power to force technology transfers from foreign direct investment to local businesses, Vietnam has largely failed in its strategy of offering incentives to foreign technology providers to transfer significant technologies to local partners, either through negotiation with foreign investors or through other means of technology adoption.

Often, time-bound preferential trade agreements with LDCs – such as the MFA benefits for a number of LDCs – are important formal international mechanisms that both created rents and provided incentives and pressure for learning. These arrangements offered LDCs either enumerated quotas or quota-free access for some lines of garment when relatively more advanced developing counties faced quota restrictions. They also offered preferential (low) tariff

[9] A localisation requirement, or local content policy, implies a government has a requirement that there must be a certain percentage of local contents, or materials, in a final industrial product. This requirement is in violation of the WTO's agreement.

rates to some LDCs while advanced countries faced higher rates. As a result, significant rents were created from this international arrangement. A combination of institutional and political conditions created these *trade-related rents*, and a combination of incentives and compulsions (because the rents were limited) enabled and ensured learning among garment manufacturers in LDCs.

1.2.3.5. Examples of rent management mechanisms

Having reviewed all three levels of analysis in step 3 of the DRMA framework, the list below illustrates some important factors, which, in different combinations, can create the incentives and pressure for rent recipients to perform, especially to achieve technological adoption and capability-building. In this context, the rent is created in response to specific market failures faced by investors. This list provides a rough guideline, and is by no means an exhaustive list of conditions.

1. Time horizon: For a learning rent to be effective in inducing learning, it has to be available over a sufficient time horizon, such that investors have enough time to invest in new machines, new organizational capabilities and to acquire new skills to raise productivity and quality to the competitive level. This factor is especially important if the investment requires extra time to master new technology. In principle, rents that come with a time horizon must ensure that the time horizon is neither too short nor too long. It should be only sufficient to give investors the time to achieve technical and organisational capability.

2. Loss of rent and other future benefits: If the political and institutional configuration ensures that firms are sure to lose their rents over time, this can create strong pressures to invest and achieve new learning to boost their industrial capability. This loss of future rents or benefits must be substantial enough that investors and firms are pressured to take advantage of the rents that they are currently receiving to achieve new competitiveness, in order to sustain their current profits into the future.
3. Initial capability: Rent recipients must have initial technical and organisational capabilities that are sufficiently high to make the capability development strategy viable, given the nature of the technology, the gap with competitors, and the amount and time horizon of the rents that are available. For example, to transfer a new dyeing technique to domestic textile manufacturers, the firms must have the basic technical understanding about dyeing in order to absorb the new knowledge.
4. Market competition: Market competition increases pressure to upgrade if there is a gradual opening up of the market. For example, a firm is pressured to learn when rents are temporary and the gainer can only take advantage of it for a period of time before new entrants are allowed to enter the market. The opening up of the market could be due to formal institutions, such as signing a BTA with another country, or a change in government policy; for example, allowing more licenses to be issued or it could be an informal understanding with competing firms or agencies. In essence, the compulsion to raise productivity could come from competition gradually being opened up so that the learning firm or industry has to raise productivity and competitiveness to survive. On the other hand, a high level of competition from the outset can destroy incentives for learning effort because the time horizon for raising competitiveness may not be sufficient to make such a strategy viable.

5. Other informal pressures: Some of the informal pressures are speculative but it is extremely important for a rent management analysis to investigate the types of informal pressures or arrangements that may exist, such as:
    - the holding power of the informal network within the political and economic system to which the firm belongs: this can determine the firm perceived capability to protect its rents, and can also affect the firm's strategies for productive effort;
    - the pressure from an informal network on the firm to perform so as to maintain the holding power of the network, to retain rents, and to seek new rents: sometimes the network itself may want the firm to become productive quickly, to generate profits that the network needs to maintain its power;
    - personal and emotional incentives based on cultural and social values;
    - the informal rules of benefit-sharing from rent outcomes among individuals or groups in the network can have important consequences: if the firm managers are the residual claimant they may have a greater incentive to put in effort than if they are involved in other types of surplus-sharing arrangements within the informal rent allocation network;
    - the corporate culture can sometimes have important implications for efficient rent outcomes. For example, based on its military background, Viettel –the state-owned, and largest mobile phone provider in Vietnam – operates its business in an uncommonly disciplined working environment, much more so than other private and foreign businesses in Vietnam;
    - a system of formal and informal checks and balances among rent seekers or interest groups can sometimes help to prevent poor performers from permanently capturing

rents and blocking efficient performers from achieving new capability and better productivity. Such a system can help to allow rents to achieve better outcomes.

The significance of this analysis for policymaking is that, for historical, social, and political reasons, even if emerging economies could not follow the South Korean model of development, which requires an autonomous and strong leadership of the state, rents can still produce developmental outcomes if there is a combination of factors that influence firms' incentives and pressures to invest in new technologies and capabilities when they receive rents. For instance, if investors have a sufficient time horizon (condition 1), and if market competition is limited but growing such that firms can reap benefits from investments in new learning and technology (condition 4), and if the bureaucrats and the politicians who created the rent exert pressure for performance (condition 5), then rents in that sector are likely to achieve a positive outcome.

In reality, however, most sectors satisfy only some of these conditions. For instance, they may have a long enough time horizon (condition 1), but not enough pressure from elsewhere, i.e. the market, to boost learning and innovation (condition 4 or 5). Therefore, even as rents are received, investors in the industrial sector may choose not to increase investments, despite the rents. Or where there is neither a good time horizon nor the compulsion to increase productivity, the availability of rents for firms could result in speculative activities, especially in the real estate market or in the stock market. In that case, firms neither produce nor commit to long-term investment, as they will look only to capture short-term and speculative profits. Industrial capability-building would be non-existent.

1.2.4. Step 4: Firm Transformations and Rent Outcomes

In this section, the fourth step – the potential effects of the rent are compared with the actual outcomes. A rent management system produces three possible outcomes. In the first scenario, the rent allocation raises investment but it does not produce long-term benefits because productivity does not increase. In other words, an initial increase in production is largely due to input expansion, not improvements in technical and organisational capability. This strategy does not usually result in sustainable growth outcomes. In the second scenario, rent raises both investments and productivity through learning and upgrading, which results in sustainable long-term growth. In the third scenario, rents are captured or redistributed by unproductive interests, such as firms, investors or managers, and thus are not used appropriately. Here, there may not be growth at all, or there may be growth in damaging speculative activities.

Because this paper is largely concerned with technological adoption and industrial capability-building, it especially focuses on whether, in the end, rents operate as learning rents or as innovation rents. Again, the outcome can be completely different from the original intention of the rent, since the original intention may never be fulfilled.

1.2.5. DRMA Wrap-up

Throughout section 1.2, the analytical framework for a rent management analysis, namely DRMA, has been laid out. This framework is based on a fundamental assertion that no one combination of political and institutional arrangements provides exclusive access to successful rent management and developmental outcomes. In reality, a successful rent management strategy must be specific to the political and institutional contexts of a country and its political economy. To understand the factors that either drive or hinder successful rent outcomes, DRMA employs inductive analysis, which involves four steps (see Figure 0.1 and Table 0.1; for examples, see Table 0.2). First, it identifies the rent. Second, it establishes the potential incentives and effects given the existing institutional and implementation structures of the rent. Third, it analyses the configuration of politics, institutions, and industrial organisations that produce rent outcomes (see Figure 0.2 and Figure 0.3). Finally, it assesses and explains the growth-enhancing or growth-reducing outcomes. This framework thus provides an analysis of the rent management mechanism in a developing country irrespective of the policy intention. It also points to the reality that rent management strategies, which result in high productivity outcomes, only take place in a handful of sectors where there are effective structures of incentives and pressures to force the rent recipients to perform. The DRMA framework also allows analysts to evaluate the outcome of rents and to suggest areas for changes where rent management could be more effective.

Table 0.1: DRMA Four-Step Approach

Step 1: Identify the Type of Rent	**Step 2: Identify Incentives and Opportunities that the Rent Creates**	**Step 3: Analyse the Configuration of Factors Describing the Rent Management Context**	**Step 4: Assess the Outcomes of the Rents**
Monopoly Schumpeterian Learning Redistributive	Are developmental or damaging incentives created by the rent?	**1. Political Context:** the configuration of politics and institutions that describe the macro-political order for the rent. **2. Institutional Structure of Rent Allocation**: the formal and informal policy and policy- making structures	Identify the outcomes Analyse how outcomes emerge given the configuration of rent management

		that create and implement the rent. **3. Industry Organisation:** market structure, structure of firm ownership, type of technology, and initial capability of the firms.	

Table 0.2: Examples of DRMA

Benefits	Effects	Incentive / Pressure	Outcomes
1. Access to land 2. Access to credit 3. Access to business licenses	**Positive** 1. Opportunity for effective learning 2. Incentive for innovation 3. Output expansion 4. Increase scale of production to achieve economies of scale 5. Learning new capabilities or innovating **Negative** 1. Redistribution, transfers within and across groups 2. Prevention of market entry of competitors 3. Monopolisation	**Incentives** 1. Sufficient profit margins to justify investments 2. Financing of loss-making period while learning takes place **External Conditions** 1. Market competition 2. Time horizon 3. Loss of rents and future benefits **Internal pressures** 1. Consequences of failure 2. Formal and informal pressures compelling the delivery of certain outcomes **Other factors** 1. Capability of firm to perform 2. Check-and-balance system to constrain inefficient rent seekers	1. Rent raised investment; did not produce long-term benefit (productivity not increased) 2. Rent raised investment and productivity through learning and innovation (leading to sustainable long-term growth) 3. Rents captured or redistributed by interests; no output expansion or productivity increase

1.3. Conclusion

The claim in the mainstream literature on development, rents, and rent-seeking is that to achieve good outcomes there should be no rents or rent-seeking[10] (Buchanan, et al., 1980; Krueger, 1974; Posner, 1975; Tullock, 1967). In reality, not only is rent-seeking ubiquitous in developing countries, policy makers are under constant influence and pressure from rent seekers. In many cases, politicians even receive some of the rents they create and indeed require these rents to maintain political stability and the ruling coalition. However, even in cases of corruption, rent-seeking does not necessarily produce unproductive outcomes and the benefits of rent policy are not always entirely destroyed. This author argues that the real problem for development is not rent-seeking, but rather that the interests of powerful groups run contrary to the collective interest of society. Here, the solution to this problem does not necessarily require a strong autonomous state to guide, discipline, and coordinate the public and private sectors through the strategic allocation of resources or rent policies, as argued by some development economists such as Chang and Cheema (2002), and Stigtitz (1989, 2013). Rather, this author posits that the answer lies in understanding and mapping both successful and less successful instances of rent allocation within the existing rent management mechanism and to examine whether incremental policy changes can help to improve outcomes given the contracting failures, market imperfections, and constraints the country faces in different sectors.

The central utility of the DRMA framework is to help observe how the three sets of factors – politics, institutions, and industry organisations – affect the structure of *incentives and pressures* that ensure firms' effort towards acquiring technical and organisational capability. This

[10] This is not to be confused with rent outcome. In the Krueger-Posner argument, rent outcome is a negative deadweight loss.

is based on the premise that successful rent management primarily depends on the formal and informal political and institutional arrangements to produce incentives and pressure for learning and upgrading. In this context, while rents are created for a variety of purposes, the rent outcome, whether good or bad, depends on the configuration of these three factors of rent management that, in many respects have important informal elements. In essence, DRMA enables a broader understanding of the various factors – political, institutional, and economic – at play in the process of economic development, including its technological dimension. DRMA, therefore, allows for a better understanding of how and why developing countries succeed or fail to industrialise and to catch up.

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