distorted incentives in higher education, with reference to the South African case

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Much has been written about the negative effects of 'neoliberalism' on higher education from the later decades of the twentieth century until the present.¹ The crux of the problem is the structure of relationships between governments, higher education institutions and private interests.² Yet while this literature examines the damaging effects of 'corporatizing' higher education, including infringement of institutional autonomy and academic freedom, little use has been made of concepts developed in economics for analyzing the failures of markets and bureaucracies.

The present paper examines the behavior of academics and academic institutions through the lens of economists' concept of *rent seeking*. Rent seeking is the process whereby private organizations or individuals expend resources to obtain actions from state institutions that allow these private actors to earn 'rents' in excess of what they would earn in the hypothetical scenario of a competitive market. The mere relevance of this perspective for modern higher education reveals a great deal, given its origin as a description of behavior in markets for consumer goods. Furthermore, in as much as it deals with the misallocation of scarce resources, rent seeking has particular salience for developing countries where higher education competes with other pressing needs for public expenditure.

The resultant thesis is not that the academic enterprise inherently leads to rent seeking behavior, but that the structure of the modern academy increasingly encourages and rewards rent-seeking behavior of various forms. As a result the characteristics of academia that have earned it a special position in many democratic societies become at best incidental or, at worst, are merely maintained as a facade for a less laudable enterprise.

I argue, with reference to the South African case, that the consequences are likely to be particularly egregious in developing country higher education systems. After the relative isolation of the apartheid period, South African universities increasingly oriented themselves toward international metrics of success — such as cross-country rankings — and adopted similar approaches to institutional management. Internationalization itself was, and remains, highly desirable in order to improve the quality of local research that was compromised under apartheid-era isolation and political control. However, adopting such metrics and associated incentive structures meant that the problems of such systems would manifest locally. The aim of the present paper, however, is not just to comment on the negative effects of such systems, but rather to present a different lens through which to view a subset of these problems at both the international and local level. The hope is that accurately characterizing the dynamics that undermine the substantive foundations of academic activity will provide a basis for future reform.

¹ See for instance Giroux (2002) as one of many such expositions.

² The notion of neoliberalism is given little credence by economists, arguably because of the discipline's general disregard for the history of economic thought and associated disavowal of the notion that established views within the discipline may be ideological, rather than 'scientific', in nature. A valuable, general overview of the concept of neoliberalism, and its effect on societies and public policy in recent decades, is provided by Harvey (2005).

1 Rent seeking as a concept and framework for analysis

Rent seeking is a concept developed in economics by Tullock (1967) and Krueger (1974), with the term itself coined in the latter paper. The objective here is to use this frame to better characterize some of the specific corrupt and corrupting processes in the modern academy in general, along with some selected examples from the South African case.³

The classic textbook example of rent seeking is where a firm obtains monopoly power, or protection thereof, from government thereby allowing it to overcharge consumers – to the consumers' detriment but the company's gain.⁴ Non-economists should be aware that the originators of the rent seeking concept framed it as illustrating *state* ('bureaucratic') failure. For that reason it continues to be disproportionately associated with schools of thought that favor a minimal role for the state in the economy and society at large. However, the more recent literature has recognized that rent seeking is a broader phenomenon. Notably for our purposes, it recognizes that markets and market mechanisms can *facilitate* large-scale rent seeking; as was the case for the privatization policies introduced after the collapse of the Soviet Union, which led to the redistribution of public assets to a small number of oligarchs (Roland, 2002).

The broad applicability of the concept is captured by Tollison (1982, p. 576): "The theory of rent seeking involves the study of how people compete for artificially contrived transfers." Within this, the concept of rent seeking emphasizes three issues:

- 1. The use of public institutions to redirect social surplus toward private actors (of various sorts);
- 2. Welfare loss from resultant distortions in what is produced by these private actors;
- 3. The private and social costs incurred in the competition to obtain, or secure, such rents.

Rent seeking is therefore a relevant concern in higher education in two main respects. The first is where academics and higher education institutions seek to secure, through lobbying of various kinds, funds without regard to the social value of their activities. This could involve, for instance, university managers overstating the link between higher education and economic growth, or individuals making

³ Work in the philosophy of science literature develops the same basic insight in a somewhat different direction. For example, Philip Kitcher critically examines the purpose, achievements and determinants of scientific activity – see for instance his book "Science, Truth and Democracy" (Kitcher, 2001). And Jesus Zamora Bonilla uses a formal model of knowledge production in economics to ask: "Economists: truth-seekers or rent seekers?" (Zamora Bonilla, 2002).

⁴ Another classic example of a different kind is lobbying by professions (or 'guilds') to limit the number of newly recognized professionals in order to maintain artificially high wages. For example, an association of accountants may place a limit on the number of new chartered accountants who can qualify in a given year, regardless of skill level attained. By analogy with such examples, some (Pelagidis & Mitsopolous, 2006) have in fact argued that restrictions placed on private HEIs may constitute evidence of rent seeking by public HEIs. That draws attention to the importance of the substantive merits of such restrictions: are they in fact to ensure quality higher education, or to protect incumbents from higher quality competition?

unwarranted claims about the societal usefulness of their academic research. The second is where individuals and institutions incur significant costs and depart from desirable academic activity in order to compete for funds. The negative consequences of lobbying can be in the form of excessive public or private funds being diverted to higher education, or misallocation of resources within the higher education sector. In parallel, the processes through which individuals and institutions attempt to secure a share of these 'contrived transfers' can cause fundamental harm to the academic enterprise.

It is important to note that while rent seeking is related to the much older notion of 'economic rent' (excess returns to a factor of production), its defining characteristic is a focus on the processes by which rents are deliberately created and competed for – as well as the consequences of such processes for society. It is in this sense that the notion of 'rent seeking' is fundamentally concerned with *political economy*, as opposed to narrower concerns with value or simple market mechanisms (Congleton, et al., 2008).

As a result, the prevalence and harmful consequences of rent seeking may be worse in contexts where institutions and standards are weaker. Unfortunately, for a variety of reasons, this is often the case in developing countries – suggesting that we should be particularly attuned to ways in which rent seeking dynamics in higher education could be more harmful in those contexts.

An emphasis on public higher education institutions follows naturally from a concern with the public interest ('social welfare' in economic parlance): the social costs from misallocation of public funds are, by definition, higher than misallocation of private funds such as those of philanthropists. It is also consistent with the focus of the original economic literature on rent seeking on the use of public institutions to capture social surplus. This necessarily implies that the immediate social costs of rent seeking in public higher education institutions are likely to be higher, but it does not mean that private institutions are any less prone to rent seeking or are any less likely to undermine the academic enterprise in this fashion. Indeed, in countries where private higher education is significant in size and influence – such as the United States – institutional dynamics that encourage rent seeking may be significantly influenced by the culture of private institutions.

The form of analysis described above may at first sight appear to internalize many of the ways of thinking that are criticized in accounts of the so-called neoliberal influence on the academy. McKenna (2012, p. 17), for instance, describes how, "the university…has found itself being described in ways that have more to do with wealth creation than with either social justice or disciplinary progress". That is not, however, what is being done here.

The analysis of rent seeking is proposed *in recognition* of the fact that academics and academic institutions have increasingly come to act like profit- or surplus-maximizing entities. In this sense, an analysis of rent seeking proceeds from the increased influence of markets and market mechanisms in

higher education (Dill, 1997). And it is therefore entirely compatible with critiques of the corporatization of academia.

Furthermore, using the concept of rent seeking does not imply that funding for academic research *must* be determined by bureaucratic cost-benefit analysis. Instead it follows from recognition that, however important we may believe academic research to be, there are limited social resources available and many competing priorities.⁵ Attempts to secure greater resources for academics and academic institutions require diversion of those funds from elsewhere, leading – explicitly or implicitly – to tradeoffs.

Finally, the question arises as to the role of individual academics in rent seeking relative to academic institutions and institutional managers. In most countries, the examples of rent seeking described below have come from top-down impositions of new institutional incentive structures. This suggests that initially individual academics may not have been inclined toward such behaviors, and that is supported by, amongst others, significant opposition to such developments in higher education. However, one of the key insights of the literature on rent seeking is how certain changes in institutional structure inevitably induce many individuals to engage in rent-seeking activities.

In this regard, it is useful to distinguish between what economists sometimes refer to as the 'intensive' and 'extensive' margins. At the intensive margin, the behavior of individual academics already within the system is altered in response to changed institutional priorities – manifesting in direct incentives through job requirements, promotion and remuneration criteria. At the extensive margin: individual academics who are unwilling or unable to change their behavior to fit the new institutional dynamics leave the higher education system; and those attracted into, and selected for, academic posts are more likely to behave according to these new expectations. The result is that over a period of time, the system shifts to a new equilibrium in which an increasing proportion of academics are willful, perhaps even enthusiastic, participants in rent-seeking dynamics. It then becomes impossible to separate institutional characteristics from individual behavior. And while it may be possible to create 'pockets of resistance', these are unlikely to be sustained and expanded without either effecting changes in the institutional rules or somehow becoming congruent with them.⁶

Buchanan (1980, p. 4) argues that individuals do not "become different moral beings", but simply continue to engage in maximizing behavior in an altered institutional structure. The analysis of the present paper takes a less sanguine view. Buchanan assumes that the only alternative to a rent-seeking structure is "an ordered market structure" in which profit-seeking leads to socially beneficial

⁶ This is not a normative statement, but simply a recognition of the inexorable impact of strongly enforced institutional rules and incentives.

⁵ This echoes Lionel Robbins' widely-cited definition of the foundational problem of economic analysis: "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses" (Robbins, 1932, p. 16).

outcomes, but in higher education this arguably begs the question. The appropriateness of market mechanisms is revisited in the recommendations at the end of the paper.

I now turn to the analysis of rent-seeking behavior, first in higher education internationally and then within the South African context in particular.

2 Some global trends in academic rent seeking

What patterns of behavior and institutional structures can be characterized as 'academics competing for artificially contrived transfers'? The most obvious examples emerge from formalized assessment and incentive systems, such as the emphasis on winning grant funding, university ranking systems and funding allocation mechanisms. It is now recognized in the economics literature – see for instance Baye and Hoppe (2003) – that it is possible to establish formal equivalences between various 'contests' of this kind and institutional structures that lead to rent seeking. As noted above, the effects of rent seeking are likely to be more socially harmful when it takes place in publicly-funded universities simply because of the inefficient allocation of public resources. However, all the manifestations of rent seeking considered below may occur in privately-funded institutions and have no less of a corrupting effect on the academy itself.

2.1 Grant funding

It is increasingly a standard requirement in academic job advertisements, especially for research-oriented academics ('tenure track' rather than 'teaching track'), that candidates have a record of successful grant applications. However, the reasons for including this requirement are rarely, if ever, publicly explicated. A popular high-level justification is that institutions are pressed for resources and therefore need academics to show an ability to obtain these externally. A more critical view is that bureaucratic ambition and avarice have become increasingly acceptable in academia. Furthermore, the implicit suggestion that grant-raising ability is correlated with intellectual ability arguably reflects an unjustified faith in quasi-market mechanisms.

The source of the desire for ever-greater external funding necessarily varies by institution, but there is little evidence to indicate that it arises as a matter of necessity. Instead, it appears equally often to reflect an apparently unquenchable desire of many academic institutions for more financial resources. In that context, academics who have demonstrated an ability to bring in the most money are *de facto* more desirable than others. Yet it is appropriate to ask: what are these funds intended for? On the one hand, grants secured are typically for academics and their research, not the institution at large. Many institutions, however, increasingly require a share of successful grant applications. In some cases this is framed as covering institutional overheads due to the academics in question, but the inclination in many instances to take a percentage share – rather than a fixed amount per time rendered – gives the

lie to that claim. Besides the institution's own share, academics can buy-out their time thereby freeing-up salary funds for lower paid contract teaching staff. Some proportion of grants may be available to support graduate students and those funds of course go straight back into university coffers. The basic calculus is not subtle and it makes absolutely no reference to what is being researched or where the money is coming from.

The second justification would dispute that the emphasis on grants is incompatible with more substantive notions of merit. To the contrary: those obtaining grants are evidently the ones producing, or able to produce, the research that 'the market' values most and hence are by definition more meritorious. Economic analysis has come a long way since the heyday of naïve or self-serving notions that the default outcome of market processes are socially or institutionally optimal, but this hoary claim continues to rear its head in many social debates – including in relation to higher education. For the assumption that grant funding markets maximize social returns to research to be true, we would need to believe that those determining the parameters of grant funding have no private interests or agendas of their own *and* are somewhat omniscient in the sense that they can discern in advance what research is likely to be important (whatever that means). Neither of which appears plausible. More plausible, in fact, is that these parameters are determined by fads, or in such a way as to discourage overly critical or radical research, or to guide research toward subjects favored by politicians or bureaucrats.

The stubbornness of faith in market mechanisms can distort even relatively thorough attempts at studying the efficacy (or not) of grant-based funding. For example, Jacob and Lefgren (2011) examine the impact in the United States of receiving grants from the National Institute of Health (NIH). They find that grants averaging \$1.7million in size lead to only a 7% increase in publications (equating to about one article) by recipients relative to non-recipients, over a five year period. The authors choose to conclude that this is probably (no direct evidence is available) due to researchers who fail in their NIH applications getting funding elsewhere, reflecting a 'competitive market for research funding'. An alternative conclusion might be that academics' desire for funding is weakly related to even the crudest measures of academic output. In other words: the authors could also have considered that grant funding has little to do with output and more to do with rent seeking.

This last point has broader relevance. Higher education funding agencies themselves are rarely mere conduits of funding, in as much as they contribute to lobbying for funds as well as encouraging the notion that 'winning' grants is inherently laudable. Along with universities, such agencies may institutionalize rent-seeking behavior in the academy, since their own size and status is strongly associated with the amount of research funding dispensed. This point is revisited at the end of the paper when discussing possible responses to rent seeking in academia.

2.2 Bean counting: publication and citation quantities

Rent seeking in academia is not limited to relatively self-evident cases such as grant funding. In traditional markets for consumer goods, rent-seeking opportunities may be the result of active lobbying by firms. In academia, at least to date, it appears that opportunities are more often the result of high-level political or managerial decisions that produce rent seeking. This occurs not only by making rents available, but creating institutional rules and practices that actively incentivize rent-seeking behavior. Ironically, these frameworks are commonly the by-product of interventions that are supposed to improve accountability, quality and output.

A good example is the use of bibliometric measures of academic success: from simple counts of publication numbers, to the slightly more subtle counting of citations, to technically involved indices based on weighting citations by various other factors, and a plethora of 'impact' measures. Each of these, in the ostensible service of measuring and thereby encouraging 'quality' or 'output', replaces a direct intellectual judgment of the value of a piece of academic work with a number. That number is intended to be comparable across a wide range of contributions so that it can be used to measure academics and academic institutions relative to each other. It may be that when these measures first began to be introduced they were a useful, if very crude, basis for assessing patterns and trends across institutions, regions and time. The generic problem with measurement systems is that once rewards are attached to them individuals and organizations orient themselves to the measure itself, despite acknowledgement that the measure rarely captures the substance of whatever is of interest.

In academia, researchers begin to focus on number of publications and extent of citations rather than standards of good research practice (van Gunsteren, 2013). How does this constitute rent seeking? Recall the three socially costly aspects of rent seeking outlined above: rents captured by vested interests from the broader citizenry; welfare loss from distortions in what is produced; and, the social costs of vested interests competing for these rents. As regards the first, more public money may be allocated to higher education due to the perception that bibliometric measures provide greater reassurance of quality. However, it is the latter two costs that may be most problematic.

By virtue of corrupting the processes whose output these measures are intended to assess, bibliometric measures may diminish the social return from the resources provided to the individuals and institutions engaged in producing academic research. In that sense the cost of rent seeking can be characterized as the gap, likely growing over time, between the counterfactual state without rewards premised on these measures and the actual state in which research priorities have been distorted.

The incentive is for academics to outdo each other by publishing more papers than they would otherwise, or attempting to obtain more citations. The first can be done in a number of ways, some of which are: submitting research with flaws known to the author but concealed from reviewers; utilizing social networks to increase the chances of favorable review (a process that is often reciprocal in

nature); submitting work that is plagiarized, either from others or inadequately differentiated from one's own prior publications; breaking pieces of work into the maximum number of publishable components ('salami publishing'); and, submitting work to lower quality outlets.

While citations might seem harder to manipulate, there are ways of doing so – depending on the specific context. Anecdotes abound of referees, and journals, demanding that authors cite work tangentially related to their submitted paper – seemingly in order to increase citation counts for the referee or journal. A more systematic, indeed startling, form of abuse is the creation of networks, sometimes even entire sub-disciplines and journals, in which authors reciprocally cite and favorably review each other's work. Such examples, albeit extreme, highlight the absurdity of taking generic statistical summaries of research overly seriously.

Another subtle example is that in winner-take-all systems success can be self-reinforcing. It is considered more important to cite articles by 'successful' authors, or in highly-ranked journals, simply because they are highly-ranked. The ranking may be partly based on bibliometric measures, thereby leading to a process that only avoids being entirely circular by virtue of some substantive historical reason for initial success – which in the present may be almost entirely irrelevant. Rent-seeking behavior in this instance can involve two actions: the exploitation of being on top of the citation hierarchy to obtain resources that have little to do with the substance and quality of one's output; and, the exertion of effort and spending of resources to climb the hierarchy in order to access these rents.

2.3 University and departmental rankings

Linked to publication and citation counts are institutional rankings, such as those produced by Times Higher Education ('THE') and Quacquarelli Symonds ('QS'), all of which incorporate some form of bibliometric measures in the creation of their rankings. Indeed, in the absence of similarly convenient quantitative measures of other 'outputs' of higher education institutions such as the quality of teaching, research is arguably given weight out of proportion to its societal importance simply because it is easier to measure (along some dimensions). This reflects arguably the main practical problem with such rankings, namely that the basis on which they are constituted does not – and cannot – reflect what is socially important.

At base there are two critical challenges to the use of rankings. First, is the basic idea intellectually coherent? Does it make sense to try and create an index by which one can compare such complex institutions across very different social contexts? Second, what aspects of rankings are particularly problematic and, *if* one believes they should be accorded any importance, how could they be improved?

A recent UNESCO publication (Marope, et al., 2013) usefully brings together opponents and proponents of rankings, extending an already rapidly-growing literature on the subject. In that

volume, the contributions of Ordorika and Lloyd (2013) – providing a critique located in the Latin American context – and Scott's (2013) critique of the nature of rankings and the driving forces behind them, are closest to the stance of the present paper. In contrast, the editors' introduction to the UNESCO volume (Marope & Wells, 2013) effectively shirks the first question above. After cursorily noting that university ranking takes place in a broader global context where such approaches are in vogue, and that rankings have had a pronounced effect on individual and institutional decisions, the editors state that "the question therefore seems to be less about whether or not universities should be compared and ranked, but the manner in which this is undertaken." (Marope and Wells, 2013: 9)

Fashion and influence hardly constitute an intellectual defense for devices that are having a profound effect on universities and yet this style of argument appears to prevail in the literature. As Marope and Wells put it, "Diverse as these constituencies [of critics] may be, they mostly start with an acknowledgement that 'love them or hate them, rankings are here to stay'" (Marope and Wells, 2013: 12). It is no small irony that such an intellectually specious position is having a profound impact on institutions that are themselves supposed to be producing intellectual critique and facilitating the development of future intellectuals.

One notable area where the 'fait accompli' argument falls flat is that it does not explain what is at stake if institutions do not actively orient themselves toward the (ever shifting) metrics that underlie the various ranking systems. Logically, if institutional priorities based on social priorities – broadly conceived to include high quality academic institutions – do not correspond to ranking success, then attempting to achieve higher rankings must involve a distortion from the social optimum. Alternatively, if the criteria measured by rankings are compatible with social priorities, then rankings need play no role in institutional planning or behavior. The only intermediate position would be to argue that achieving higher rankings requires an initially negative distortion, but that once achieved the net benefits will be positive.

To say that this is speculative would be too kind. Since rankings are relative measures, then if all international institutions are 'wise to the game' it is inevitable that a large number of institutions – and those who rely on them – must 'lose'. The structure of this system is identical to competitive structures identified in the economics literature as inducing rent seeking (Congleton, et al., 2008). Furthermore, given the short-term incentives for many university managers, this situation resembles the classic principal-agent problem, in which university managers' incentives bear little resemblance to those of the institution and society they are ostensibly supposed to be serving.

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⁷ In fact, it is quite evident from the volume overview that the editors are intent on emphasizing the merits of rankings and providing defenses against criticisms, which is disappointing when accompanied by the claim of the publisher being "a neutral broker of knowledge".

Given these alternative perspectives, which correspond to the concern with rent seeking, one may ask why rankings have persisted and continue to grow in influence. One plausible explanation is that the favorable view of ranking systems by policymakers reflects the recent dominance of neoliberal thought in public policy design. Another, not incompatible, explanation is that the power to dispense with these measures is held by those in, or associated with, institutions in the upper echelons of rankings. These institutions have no real incentive to discourage ranking use, since they benefit from the favorable effect on the perceptions of potential students, faculty and donors. In some sense, rankings provide further fuel to a 'winner-take-all' (Frank & Cook, 1995) dynamic in modern higher education, in which the wealthiest and most powerful institutions either cement or increase their advantages over others.

Interestingly, in his review of Frank and Cook, Rosen (1996, p. 135) notes those authors' possible overlooking of winner-take-all dynamics in higher education:

Let us not forget that the science and engineering professions, taken by the authors as paragons of social virtue, produced many of our electronic and other innovations in conjunction with military research in the service of real arms races. Who would be inclined to say that the frenetic rent seeking gambling of engineers and scientists in computer, biotech, and other high-tech firms is socially optimal? How could one tell?

If at least some important aspects of higher education funding and development can be characterized by winner-take-all, or in this case 'winners-take-all', dynamics then rankings will support virtuous cycles for the top institutions and vicious cycles for others. This is consistent with the view that neoliberal policies primarily benefit elites. Relatedly, it is consistent with Pusser and Marginson's (2013) analysis of rankings as being manifestations of power. They argue that rankings serve the interests of current 'leading' universities, as well as the corresponding nation states.

Where national wealth is highly correlated with the presence of top-ranked institutions, as is currently the case, such dynamics may even widen the gap between national higher education systems: in developing countries scarce resources will be squandered attempting to obtain higher rankings with little or no return, whereas in wealthy nations many institutions will reap increasingly handsome rewards from simply continuing with business as usual. Dill (2009), who in general takes a case-by-case approach to the merits of market mechanisms, comes to similar conclusions, which are worth quoting in full:

the biggest danger of world university rankings, in my view, is that their simplistic measures further encourage at the international level the exceedingly expensive "academic arms race" for prestige... it is a highly costly, zero-sum game, in which most institutions as well as society will be the losers, and which diverts resources as well as administrative and faculty attention away from the collective actions within universities necessary to actually improve student learning (Dill, 2009: 6)

In this excerpt Dill has described a structure that economists would say is equivalent to a rent seeking contest.

Importantly, this comment raises an additional point that in many ways captures the disjuncture between what is societally valued and the priorities in higher education systems corrupted by various rent-seeking behaviors. Note that none of the behaviors discussed above involved disproportionate allocation of resources to *students*. To the contrary, the emphasis in every case considered is such that students are effectively a nuisance – an obstacle to obtaining rents. To be sure, students – more particularly *student numbers* – are a means to obtain resources in the case of public universities, but since the associated funding mechanisms provide no direct incentive behavior the inclination is to focus efforts where additional funds can be obtained for the individual academic, or institution, at the margin.

The examples above are often lumped together as symptoms of 'neoliberal' interventions in the academy, which may be accurate but is at times unhelpfully broad – not least from the perspective of policy makers. Their significance may be better appreciated when characterized as rent-seeking activities, arising from distorted incentive structures and leading to the waste of valuable social resources.

To provide a substantive illustration of these concerns, the next section examines how such global trends have been mirrored in one developing country, South Africa, and the implications for its higher education system and sector policy.

3 Rent seeking in a developing country higher education system: the case of South Africa

As already noted, the nature of rent seeking is such that it is likely to be more damaging in contexts where institutions are weaker. In academia such weaknesses might include: an absence of consistently maintained standards for academic research; under-resourced and poorly managed higher education institutions; and, limited controls – in terms of ethical norms, or enforcement mechanisms – on the extent of harmful rent seeking behaviors. All of these problems and others have, for instance, been noted as commonplace in many higher education systems in African countries (Teferra & Altbach, 2004).⁸

South Africa is wealthier and more economically developed than most other African countries, being classified by institutions such as the World Bank as 'middle income' – alongside countries like Brazil and Turkey – rather than 'low income' or 'poor'. Its higher education system is correspondingly better-resourced, more well-established and of higher average quality. Nevertheless, by virtue of being positioned in this middle-ground, South Africa arguably provides a valuable illustration of the dangers posed by the above trends to the furtherance of high quality, stable higher education institutions in developing countries. As with many other developing countries, the vast majority of higher education institutions in South Africa are public institutions and hence the analysis does not dwell on distinctions between public and private.

There are three popular and influential themes that have arguably dominated rhetoric within the South African higher education system after the transition to democracy in 1994. The first emphasizes 'indigenous knowledge', referring both to historical systems of knowledge that are seen to have largely been neglected, as well as the generation of new systems and pieces of knowledge that are distinctly African or South African in some way. The second emphasizes the importance of 'internationalization', which is short-hand for cultivating positive impressions among international institutions, donors and students – often by attaining status on metrics to which these groups attach most weight. The third deals in claims relating to the role of universities in the so-called 'knowledge economy' and the implied economic value of higher education output. While each theme potentially has substantive merit, each can be leveraged to support particular kinds of rent-seeking behavior.

Given the objective of matching local to international trends in rent seeking, the analysis focuses on rent seeking associated with the theme of internationalization. Rent seeking under the mantra of promoting indigenous knowledge typically takes the form of low quality work (teaching or research)

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⁸ A more recent publication by Teferra (2016) paints a more positive picture of some selected ('flagship') African institutions.

being excused by claiming some form of local exceptionalism and, in the case of research, obtaining grant funding for projects that are neither intellectually credible nor socially valuable.

Claims regarding the knowledge economy typically focus on crude correlations between economic growth and development in other countries and the size of their higher education sector. For example, in the South African discourse around higher education it is often claimed that more PhD graduates, or more publications, will increase economic growth. That in turn justifies directing public funds to such endeavors, typically through the same funding agencies and senior academics that make such assertions. Various public institutions are implicated in this behavior by virtue of actively pushing these rhetorical devices as criteria for funding allocation, to the point of effectively – if unintentionally – inducing rent seeking. Academics and academic institutions have shown little resistance, being distinguished more by their capacity to *take advantage* of such processes than taking positions of principle. Yet the relationship between such variables and economic growth is yet to be confirmed in the empirical literature, and such crude generalities fail to consider the prevalence of low quality publications and dissertations.

Putting such matters aside, let us return to our primary interest: rent-seeking dynamics in the South African context that parallel the international trends discussed in the preceding section. One recent descriptive overview of higher education funding in South Africa can be found in the report by Higher Education South Africa (HESA, 2011). An extensive government review to which that contributed, by the Department of Higher Education and Training (Department of Higher Education and Training, 2013), provides a detailed assessment of higher education funding while usefully illustrating various dominant narratives in that regard – some of which are criticized below.

3.1 South Africa's publication incentive scheme

Arguably the most blatant and costly form of rent-seeking behavior in South African academia relates to the publication subsidy scheme administered by the national department of higher education and training (DHET). The New Funding Framework (NFF) for South African higher education gazetted in 2003 expanded, most notably in monetary terms, the already existing publication subsidy scheme. Its effect and intent was not to raise the total amount of funding going to the sector, but rather to redirect more of the funding through publication subsidies thereby dramatically expanding the incentive to publish. As of 2011/12 this scheme allocated 9% of total South African higher education funding (Department of Higher Education and Training, 2013, p. 127).

The incentive works by allocating money to higher education institutions for publications in accredited journals (or other outlets) by their employees, or affiliates. In recent years this amount has been approximately \$10, 000 per sole-authored, accredited publication. Where there are multiple authors the amount is reduced proportionally, though order of naming is not considered. Some

institutions give authors a share of the incentive, while others link accredited publications to distribution of research funding and academic promotion.

Accredited journals come from one of three sources: the Thomson Reuters/ISI Web of Science; the ProQuest International Bibliography of Social Science (IBSS); and, South African journals not on these lists that have been directly accredited by the Department of Higher Education. In 2015 there were 274 journals in the last category.

Although there do not appear to have been any rigorous statistical analyses, the general consensus is that the NFF had a substantial impact on the total number of publications as well as publication per academic. Pouris (2012) comes to this conclusion and the descriptive statistics he provides are striking: from 1981 to 2004 total publications in the databases he examined increased from 2,000 to 4,000 on a fairly flat trajectory, whereas between 2004 and 2010 they increased rapidly to 7,500.9 On the basis of this, and emphasizing the importance of publication and citation rankings relative to other countries, Pouris comes to the hubristic conclusion that: "Provided that the existing incentives continue...South Africa may be on the verge of a scientific renaissance" (Pouris, 2012: 6).

The most notable problem with the system is that it encourages publication in lower quality (local or international) accredited journals. This is simply because the reward for publication is the same across all accredited publications, but the preparation, submission and revision costs – in terms of actual time and ability required – are lower and the probability of acceptance is higher for lower quality journals. In some instances these incentives may even induce individual academics, or academic institutions, to engage in fraudulent – or ethically questionable – publication practices.

As regards benefits to academics themselves, the system rewards institutions that are able to 'poach' academics with relatively high publication rates from other local institutions. The problem being that while this may allow individual academics to capture more of the 'surplus' by having their wages and conditions of service improved by competition between institutions, it leads to no improvement in the return to public funds. Similarly, the system incentivizes importing foreign academics with high publication rates regardless of whether their research is relevant to an institution's focus areas and teaching, or indeed of high quality. It particularly rewards the accumulation of foreign 'affiliates' who are based in international institutions, costing local institutions very little but allowing them to claim up to a full half of the subsidy for affiliates' publications.¹⁰

While policymakers, fund-dispersing institutions, academic managers and some academics have been quick to laud increases in publication numbers, they have shown little interest in investigating

⁹ Pouris notes that he only used South African publications in "the ISI-Thomson Reuters databases (Science Citation Index Expanded, Social Sciences Citation Index and Arts and Humanities Citation Index)".

¹⁰ Where an author has two affiliations, the subsidy is split between institutions if both are local. If one institution is international then the local institution receives half of the subsidy.

possible negative aspects of this. There are a few instances of academics speaking-out against the corrupting nature of the incentive scheme (Vaughan, 2008; Macleod, 2010; Muller, 2012), but the predominant attitude appears to be one of self-serving enthusiasm, or a sense that the funding framework is a *fait accompli*. All the above critics note that, in Vaughan's (2008: 92) words: "there is a powerful perverse incentive that encourages South African researchers to publish as many papers as possible in the least demanding journals".

A recent, extensive *Ministerial Report on Higher Education Funding* (Department of Higher Education and Training, 2013) gives little explicit attention to such perverse incentives, concluding that the system "has impacted very positively on the university sector as a whole and has had very positive effects on the research production of [Historically Disadvantaged Institutions] as well as of the universities of technology" (Department of Higher Education and Training, 2013, p. 307).

The report does note concerns about a quality-quantity trade-off, but at no point acknowledges that the incentive system may directly induce the production of low-quality research. It does recommend, however, that: "the current funding framework must be adapted to actively reward *excellence* and *quality*, rather than *quantity* alone" (emphasis in the original, 2013, p. 305). The proposal involves creating a three-tier system based on journal impact factor: publications in journals without a measured impact factor would receive 0.8 of the incentive, while those in journals with an impact factor greater than 1 would get 1.2 times the incentive. Arguably this would do little more than dent the returns to low quality publications, rather than meaningfully addressing fundamental distortions.

In 2015 the NFF was superseded by a new Research Outputs Policy, but the structure and much of the content of the system remain the same. The following statements, extracted from different parts of the new policy, are suggestive of a growing awareness of the problem even though there is a reluctance to acknowledge or investigate it:

- "Institutions should be cautious of directly incentivising individual authors as this practice is promoting perverse behaviour in some cases."
- "Institutions and academics must remember the importance of research integrity when submitting their claims and are urged to focus on quality research and not maximum accrual of subsidy funds."
- "The integrity of scholarship should also be taken into consideration when recycling previously published work and dividing research outcomes between articles."
- "Institutions should safeguard against predatory journals whose main purpose is financial gain rather than the quality of research."

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¹¹ This resignation to the inevitability of such destructive forces is identified as a key issue in Giroux's (2002) work.

Under the rent seeking conceptualization of such systems, appeals to individual or institutional integrity are not likely to be successful. The system directly creates incentives for the activities cautioned against, undermining cultures of ethical practice, and therefore only measures that carry suitable material punishment are likely to counteract these undesirable effects.

As a last point, one may note that incentive-related problems are not limited to funding for publications. Universities receive up to approximately \$30, 000 per PhD graduate, creating a strong incentive to create or expand postgraduate programs regardless of academic capacity or student ability. Interestingly, as noted by the Ministerial Report, there had not been the same dramatic upsurge in graduation rates as with publications. From 2000 to 2008 total publication outputs increased by 48% whereas doctoral graduates increased by only 20% (Bunting, et al., 2010). One could hypothesize that the cost of producing low quality PhD graduates is too high compared to the alternative of low quality publications. An alternative is that the production of doctoral graduates responds more slowly to incentives: between 2008 and 2013 the growth in graduates and publications was approximately 70%. More detailed empirical work would be required to test different explanations for these trends.

3.2 World university rankings

In the last five years a number of South African universities, encouraged also by the Department of Higher Education and Training, appear to have taken enthusiastically to the idea of competing in world university rankings. More than one vice chancellor has declared an ambition to either raise an institution's ranking or, more specifically, to place above a certain rank ('top 100' or 'top 200'). This has taken place with little debate or public consultation. The response to concerns regarding the distortions that may be introduced and likely disjuncture between rankings and South Africa's higher education priorities has typically been that whatever the merits of rankings, South African institutions have no choice but to pursue them (Price, 2010; Potgieter, 2013; Soudien, 2014). Caught in the tide of international higher education trends, developing country universities cannot afford to stick to rigid principles but must be strategic since – repeating the argument made by others internationally – rankings "are not going to disappear, whatever the criticism".

The preceding section argued that this sense of inevitability is misplaced and creates a different inevitability: institutions will embark on socially costly endeavors that will not reap a corresponding return. Given that, the logical basis for believing that universities must try to improve their rankings is unsound and South African institutions and policymakers would do well to reconsider the current stance. These measures do not satisfactorily capture teaching quality or have any capacity to reflect

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¹² Based on calculations using performance indicators for 2009 to 2013 from the Higher Education Management Information System (HEMIS) published online by the Centre for Higher Education Transformation.

the local context or priorities. Progress is more dependent on the methodology of the ranking agencies and performance of other institutions than any actions within individual universities. Yet such actions could distort not only short-term priorities but also the longer-term project, particularly important in the still-developing South African academy, of building stable, high quality institutions.¹³

Max Price (2010), vice chancellor of the highest-ranked university in the country, has argued that rankings are important because they inform perceptions held by potential foreign students and faculty:

we cannot ignore the rankings because, for all their flaws, people the world over pay attention to them. This can be turned to the advantage of the university and the country...Many of the top international staff we interview say they are applying to UCT because of its globally competitive position in the rankings. The same applies to students and post-doctoral fellows.

Two aspects of this argument are particularly noteworthy. First, it is not clear why potential academic staff would rely on such a crude measure with which to make their relocation decisions. ¹⁴ Second, the heavy emphasis on the inherent desirability of whatever is 'international' is suspect. In the face of conflicting rhetorical devices about internationalization, indigenous knowledge and community involvement, there is a substantial chasm that is leapt in making the attraction of foreign citizens a valuable goal in-and-of itself. It is perhaps not coincidental that at least one ranking system – the Times Higher Education ranking – has a scoring component which yields a greater score for institutions with higher proportions of international students and staff.

What remains, of course, is for the development of alternative, credible domestic mechanisms for ensuring institutional accountability and quality. Ordorika and Lloyd's (2013) discussion of the Latin American approach provides a useful case study. The authors examine the Mexican example, where instead of a ranking there is a publicly available database containing a broad range of indicators, for each institution, that may be of interest to students and faculty wanting to select an institution. The basic point being that information and transparency are valuable, but there is no reason why these need depend on proprietary international indices that are generic and overly simplistic.

3.3 Grant funding

An interesting dynamic regarding rent seeking in academia is the extent to which the ability to capture rents is dependent on seniority. This appears to be particularly pronounced within the South African funding system. One example is the South African National Research Foundation's (NRF) commitment, since 2006, of significant funds to a South African Research Chairs Initiative.

¹³ On a more positive note, in 2014 the vice chancellor of the small, but relatively well-regarded, Rhodes University stated that the institution would not participate in international rankings. Critics, however, argued that this was merely an ex post justification necessitated by the institution's inability to compete.

¹⁴ More rigorous social science research would also distinguish between conversational constructions of motivation and individuals' actual motivations.

These chairs are awarded in a 'bidding' process between institutions and require that recipients spend a *maximum* of 5-20% of their time on undergraduate teaching and administration. The Chairs are awarded for a period of 5 years, renewable up to a total of 15 years, with the chair being allocated R1.5mil-R2.5mil (\$125,000-\$210,000) per annum. The expectation is that chair holders will be supervising in any one year approximately 10 Master's and PhD students. Evidently these are highly lucrative, both for individual researchers and institutions, potentially allowing an academic to focus on research for a substantial period of their career. A total of 92 such chairs had been awarded as of 2012 and 150 by 2015, a striking number given the generosity of these awards by local and international standards, contrasted with the relatively small number of internationally competitive academics within the local system.

In addition to this initiative, the NRF administers a rating system for academics, which in turn is linked to annual grants based on a researcher's awarded rating. In both cases part of the stated rationale is that while the funds are awarded to senior academics, these recipients will utilize the resources for student scholarship funding, equipment, event organizing and the like. Taken together, however, one might argue that the two initiatives act to create long-term gatekeepers for a significant proportion of nationally available research funding. That in turn creates very strong incentives for individual academics to gain access to such positions, and for institutions to expend resources outdoing each other to obtain them. It creates little space for new generations of researchers, which is particularly concerning given the lingering effects of apartheid-era mediocrity.

With the limited incentive for critical analysis by incumbents who have obtained such funding, or might hope to do so in future, it is unsurprising that there has been little rigorous evidence on the efficacy of these initiatives or possible distortionary effects. One recent exception is the analysis by Fedderke and Goldschmidt (2015). Those authors examine research outputs to see whether the allocation of funds to SARChI Chairs "makes a material difference to [recipients'] productivity and impact". The findings indicate that while there was a statistically significant increase in research output associated with holding a Chair, the size of this effect was relatively small when compared to researchers holding similar NRF ratings.

Taking Fedderke and Goldschmidt's (2015) findings at face value, an additional point stands out.¹⁵ The cost per additional publication attributed to receipt of a Chair was very high: between \$11,000 and \$18,000, for the highest and lowest rated Chair-holders respectively.

As with the preceding issues, a real concern is that South African academia's legacy of apartheid insularity, mediocrity, and the quality limitations arising from developing country resource constraints, mean that generous research funding of the kind described is not likely to be yielding an

¹⁵ It is a moot point whether by modern econometric standards the analysis employed by the authors is adequate for identifying the causal effect of holding a Research Chair.

adequate social return (broadly or narrowly conceived). A point made by Jacobs and van der Ploeg (2006) may be particularly relevant to the South African case: "if there is less competition in the market for higher education...monopoly rents are larger and this results in more rent-seeking activities of insiders." (Jacobs & van der Ploeg, 2006, p. 558)

4 Negating rent-seeking dynamics

The statement by Jacobs and van der Ploeg touches on the point with which our analysis began: assertions regarding the beneficial effect of corporatizing higher education often rest, implicitly or explicitly, on claims in economics regarding the beneficial effects of markets, but neglect the existence of countervailing theories of market failure. In this light, the negative consequences of corporatization are due to both the inappropriateness of the neoliberal corporate model for many aspects of higher education *and* the failure to couple corporatization with safeguards against vested interests and distorted incentives.

One possible response to these failures is to reject such interventions in their entirety, as has been the case with critics who argue that these inherently infringe on institutional autonomy and violate academic freedom. The problem with that stance is that the question of how higher education systems *should* function with adequate accountability remains unanswered. Academic freedom can be undermined by intra-institutional factors as well as extra-institutional ones, and – more importantly – there is no substantive reason to believe that academics are inherently incapable of the kinds of behaviors that necessitate accountability mechanisms in other human endeavors.

These issues are evidently more pressing where allocation of public funds is involved. For scientific activity, Kitcher (2001) has made a strong case for a process ('well-ordered science') that is consistent with democratic notions of accountability. One major limitation of that approach, however, is that many worthwhile academic activities are not oriented toward sharply-defined forms of achievement, or premised on claims of direct social (or economic) value. Nevertheless, since it is now commonplace for the higher education sector to lobby for funds on the basis of social and economic benefits, the use of funds and effects of incentive structures need to be continuously reassessed in order for academia to benefit society rather than parasitize it.

A more immediately pragmatic position, then, would be to argue that *if* market-like competition is to be used in higher education more attention must be given to novel approaches to design and regulation in order to minimize unintended, negative consequences such as rent seeking. Modern economics increasingly recognizes that careful attention to such details is required for markets to achieve desirable social outcomes.

For instance, in the case of university rankings there are no persuasive arguments establishing a relationship between pursuit of rankings and the public good. To the extent that rankings are a means of signaling university quality to potential students, funders and academic staff, alternative – less distortionary and less costly – methods could be found.

In other cases, it is important to reflect on what exactly the intended outcome is and why it is socially valuable. This in turn must be coupled with an honest appraisal of existing vested interests, as well as those that may be created by particular interventions. In the case of publication output, widely varying claims have been made regarding the benefits of increasing publications: from stimulating economic growth to improving the quality of higher education. For each rationale, different alternatives may exist and different measures of success are relevant. These should then inform the development of appropriate accountability, or incentive, structures.

In the case of funding mechanisms for institutions and individual academics, it is necessary to take a suitably critical stance to the vested interests of those proposing particular policies. Academic managers, senior academics and grant-dispersing organizations — such as national research foundations — all have very specific vested interests and cannot be assumed to objective brokers. Perhaps *the* critical observation of the rent seeking literature is that it is logically contradictory to design a system to achieve desirable outcomes because of self-interested, maximizing behavior on the part of its participants, while naively relying on the expressed preferences of those self-same institutional actors to determine the systems characteristics.

All of this suggests a number of areas for future research. Conceptually, there is much work to be done on designing alternative accountability mechanisms for higher education that minimize, or preferably avoid, rent seeking. While it is doubtful that formal models from the economics literature will prove useful, some of the qualitative insights from such work may be used to identify parameters that deserve greater attention – including different forms of vested interests.

To improve our understanding of the current state of affairs, there is significant scope for empirical work that examines the costs incurred within institutions through rent-seeking behavior, across different types of incentive mechanisms. Furthermore, as noted above in relation to developed versus developing countries, how such responses vary across different country contexts may also be important. In this regard one issue deserving particular attention is the possible negative effects of such mechanisms on teaching resources and teaching quality.

Related to this issue, another interesting possibility – besides the above forms of engagement with design of accountability mechanisms – is the harnessing of the power of students in the higher education system. As noted, there is good reason to believe that the types of rent seeking created by existing mechanisms divert resources from teaching. To the extent that the value of student's experience is dependent on this, they are the most immediately affected. And yet in a market system,

students as consumers should have significant power. While there are persuasive arguments against this neoliberal conception of students, there may be some merit to exploring positive implications of this positioning within otherwise problematic systems.

The fundamental proposal of the present paper has been that the current trajectory of the modern academy appears to be creating a system founded on rent seeking, which is antithetical to socially valuable intellectual inquiry. I have attempted to illustrate this with reference to particular international trends, and argued that the South African case reveals potentially greater risks to developing countries. Through uncritical imitation of international trends South African higher education risks being sucked into a maelstrom of inherently corrupting incentive structures, combined with low aggregate levels of competence, high societal demands and weak institutional safeguards. Those who ascend high enough in that system may be able to prosper, but the prospects for the majority of participants in the higher education system – and the broader society that ought to benefit from it – appear grimmer.

Individual resistance to such pressures – as well as rhetorical exhortations to act in the public interest – is likely to be futile, because rent-seeking dynamics arise from particular institutional structures and incentives. To the extent that policymakers are genuinely concerned with the public good, and not hopelessly enamored with a particular ideological position, the objective should be to ensure that hubristic claims regarding the benefits of corporatization and higher education markets are forced to address the implications of well-established theories, and evidence, of market and bureaucratic failure.

Even then, the 'pragmatic' approach may not be enough. As critics of neoliberal policies have pointed out, a major problem with the economics literature is that it largely neglects *intrinsic* motivation. Due to similar pre-occupation with easily measurable factors, the literature on rent seeking almost exclusively considers rent-seeking losses in material terms – neglecting broader harms such as to institutional culture, ethical behavior and so forth. Where the desirable social outcomes are not easily measurable, and cannot be achieved through market-like mechanisms, then the economic literature on rent seeking provides little further guidance.

Finally, if policy decisions are primarily a function of an unyielding commitment to neoliberal principles rather than commitment to the public good and basic principles of intellectual inquiry, then – as with rent seeking in other areas of society – major improvements may only come about with a change in the political environment itself.

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¹⁶ Aitchison (2015) is one recent critique based on anecdotal evidence. The absence of any systematic attempt to document such practices is a damning indictment on all institutional participants in the higher education system.

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