

# Looking Beyond the Rentier State Theory:

Discursive Trends in Studies of Productivity and Entrepreneurship in Arabian Gulf Economies

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Karina P. Soemarwoto

MA Thesis – Middle Eastern Studies, Leiden University  
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Supervisor: C.A. Ennis  
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## Introduction

The past two decades have witnessed some particularly symbolic efforts by Gulf Cooperation Council (GCC)<sup>1</sup> countries to gradually diversify their respective economies away from the hydrocarbon industry. For decades, Saudi-Arabia, Qatar, UAE, Kuwait, Oman and Bahrain have predominantly relied on the valorization of hydrocarbons in sustaining their economies. Hydrocarbon exports have consistently constituted between 70-90% of annual state revenues and are responsible for the affluence to be found in the region today (Lange, Wodon, and Carey 2018). However, recent trends in international policy-making and the energy market (e.g. the growing demand for environmentally sustainable products), the volatility of the oil market, and the depletion of hydrocarbon reserves have made the unsustainable nature of some GCC economies a growing reality. Regional policy makers appear to increasingly realize the impending risks to not only current levels of economic and social welfare but also their political hegemony if the lack of economic diversity continues. Against this backdrop, the issue of economic diversification in the Arabian Gulf has attracted the attention of analysts from various backgrounds – business consultants, academics and experts from international organizations such as IMF and the World Bank.

While multiple diversification strategies have been considered, such as expansion of sovereign wealth funds and vertical integration of the oil industry (as in the case of Saudi-Arabia) (Peterson 2009), the creation of a knowledge economy has triggered a particularly interesting conversation. Recently, a number of GCC states have made large financial investments towards (scientific) research and (technological) development (R&D) facilities, education cities and university campuses<sup>2</sup>. Qatar, for example, recognizes its weak private sector as an obstacle to economic diversification, and expresses in its National Development Plan (2011-2016) the need to stimulate local entrepreneurship: “A strong culture of private sector initiative is normally characterized by a robust layer of small and medium-size enterprises. Qatar’s small and medium-size enterprise sector is underdeveloped, constituting ~15% of the economy, with most firms focused on the domestic economy.”<sup>3</sup> In response, it has launched elaborate social campaigns intended to reinvent the citizen and promote a culture of innovation and entrepreneurship. These efforts are supposed to create a national labor force that can compete in “a new international order that is knowledge-based and extremely competitive”<sup>4</sup> and realize a “technologically sophisticated” economy “characterized by innovation, entrepreneurship... [and] excellence in education”<sup>5</sup>.

The release of similar initiatives by other GCC states has caught significant attention in both public and academic spheres. So far, most of it has been directed towards hypothesizing the feasibility of so-called “leapfrogging” to the knowledge economy (Ewers and Malecki 2010). Many scholars have asked whether or not innovation and entrepreneurship can be bought, (e.g. Ewers and Malecki 2010, Wilkins 2011, Fu, Pietrobelli, and Soete 2011, Kosior et al. 2015, Vidican, Samulewicz, and McElvaney 2010). In other words, can a country whose economy has been proactively monopolized by the export of a raw commodity bypass industrialization and rapidly accumulate the highly skilled human capital necessary for the transition to a knowledge economy? In the case of GCC states, the question is subsequently formulated to: are state subsidies into university campuses, R&D, the

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<sup>1</sup> Throughout this thesis “GCC” or “Arabian Gulf” will be used to refer to the resource-rich countries or region whose economies are characterized by this property in existing literature

<sup>2</sup> Qatar National Development Strategy 2011-2016

<sup>3</sup> Qatar National Development Strategy 2011-2016

<sup>4</sup> Qatar National Vision 2030

<sup>5</sup> Qatar National Vision 2030

importing of foreign expertise and start-up support facilities (such as incubators and accelerators) sufficient to significantly change the composition of a country's industrial output, improve its performance on innovation metrics and increase the rate of endogenous small-medium enterprise (SME) formation within a timeframe of a few decades?

Attempts to answer this question necessarily draw (implicitly or explicitly) on theories from multiple disciplines of knowledge production – or reference disciplines – such as microeconomics, business management and Middle East studies. As such, scholars and analysts have the option to apply innovative perspectives to theories and methodologies proposed by previous research on the geographic regions concerned. Yet, in the case of GCC economies, the question is often placed in the familiar context of resource-rich, rent-dependent frontier economies, characterized by “politically manipulated markets” (Musacchio and Werker 2016) and unmotivated citizens.

## **Purpose of this thesis**

In this thesis, I intend to study the forces that characterize research behavior and discursive evolution in the topics of political economy and economic development in resource-rich GCC states. What hegemonic frameworks exist? How do scholars select their research question, how are prior works referenced and how might these (and additional) factors shape the discussion on said topics? Through both qualitative and quantitative approaches, this thesis will be an exploratory look into the genealogy of scholarly works on topics of political economy and economic development, and its implications on the discourse on entrepreneurship and knowledge economy in the Arabian Gulf.

## **Innovation and entrepreneurship in the knowledge economy**

A good start might be to clarify what is meant by a knowledge economy. While multiple definitions exist for the term, a common agreement is that a knowledge economy is driven by the production and valorization of knowledge rather than, for instance, manufacturing or extraction industries (Powell and Snellman 2004). This entails that such an economy might hold the following features: (1) competitiveness in the production of valorizable knowledge, or the ability to maintain a superior position on the learning curve. Consequently, the survival of a business rests on the uniqueness and low substitutability of its human capital (Powell and Snellman 2004), and (2) a strong and highly diversified private sector, for the reason that (a) the economic capacity must exist for large and long-term investments to be made into high-risk ventures, and (b) knowledge is disseminated and multiplied most effectively with increased interaction between different industries (Hausmann and Hidalgo 2013).

The knowledge economy therefore requires (1) an independent and self-sustaining system of knowledge production that continuously generates new knowledge and innovation and (2) a channel that transfers knowledge and innovation to the market. The second task is to specify what is meant by knowledge and innovation. In this thesis, I will refer to knowledge as scientific discoveries produced in higher education research environments, and innovation as new technologies or applications of knowledge that can serve the unmet needs of society. Ideally, the knowledge economy relies on a knowledge industry, which consists of (1) academic and research institutions that produce knowledge, and (2) entrepreneurial ventures that valorize their “products” and make them available to society via the market through science/tech-based or enabled SMEs. While this thesis will not explore technical aspects of the knowledge economy beyond this definition, it will address in depth the implied idealized kind of labor force that this value chain requires.

## Challenges to innovation and entrepreneurship in GCC states

Given the aforementioned properties of a knowledge economy, it is evident that innovation and entrepreneurship must be continuously stimulated in order to sustain a domestic knowledge economy. In the literature on GCC states, this process is generally expressed in terms of two types of challenges: structural and motivational. The former emphasizes the roles of existing economic and political structures as physical obstacles to advancement in new science-based ventures. A frequently cited concern is that the economy is dominated by state enterprises, or a handful of political elites (e.g. Evren Tok, McSparren, and Olender 2017, Luciani 1990 and Smith 2004). Thus, unless there is a top-down initiative to invest in long-term, large scale and high-uncertainty R&D activities that *may* lead to potentially valorizable innovations, there will be no fundamental shift towards science as a driver of the domestic economy (Sarant 2016). An article in *Nature* cites Sami Mahroum, founding director of the Innovation & Policy Initiative at INSEAD Abu Dhabi: “Science and technology cannot be undertaken by start-ups that do not have the resources to invest in state-of-the-art labs, and cannot afford to wait for a decade for their product to be commercialized” (Sarant 2016: S6-S7). As innovation-based ventures are not typically undertaken by established firms that possess the necessary capital to fund high-cost and high-uncertainty R&D, alternative sources of funding (other than equity investments) are important to ensure that a start-up company is able to survive the loss-making stages of its business.

Another obstacle is described by Ewers and Malecki (2010: 498) as “the region’s preference for insiders and reliance on government or paternalistic monarchs”, which obstructs the efficiency, transparency and meritocracy required to ensure that investment is optimally allocated to ventures with the highest growth potential. While this sounds like common sense, the statement contains ideological elements that must be taken into consideration. These arguably include a valorization of market competitiveness (and its confusion with innovation), the undermining of societies that do not fully embrace liberal markets and the casual depiction of the region as a stereotypical Orient passively ruled by “paternalistic monarchs”.

These implications inevitably lead to the second type of challenge to innovation and entrepreneurship – namely, that which relates to the motivation of individuals in GCC states among both policy makers and citizens. Herein, the rentier state theory (RST) is habitually cited for its explanation of state-society relations in Middle Eastern hydrocarbon-rich countries. The underlying assumption is that the elaborate welfare system through which the state redistributes its hydrocarbon earnings creates a so-called “rentier mentality” (Beblawi 1987). This phenomenon, which is often referred to in the fashion of some collective psychology, allegedly removes the incentive for GCC citizens to perform more than the minimum that is necessary to secure an acceptable standard of living (Hafez 2009). Motivation to undertake career ambitions or risky business ventures is therefore deemed to be lacking in the resource wealthy GCC society, and mediocrity becomes the norm (Andersson and Djeflat 2012).

## Representations of the knowledge economy and the entrepreneur

While existing literature typically distinguishes between structural and motivational challenges, the two streams are merged in that they assume a specific characterization of those who know and those who do not, or those who are capable of advancing into a Western-idealized form of the “modern” economy and those who are not. The GCC state and society, albeit implicitly, have systematically come to be categorized under the latter. In general, a certain set of personal traits is perceived to be more conducive to innovation, entrepreneurship and productivity (e.g. Hofstede 1983, Shane 2003 and Casson 2005). Over the years, this narrative has been refined and reproduced throughout

various academic works such that these traits are personified into “model” individuals that comprise the modern, developed and contributive society – and consequently, also the antithesis thereof.

The interdisciplinarity of the topic of entrepreneurship and knowledge economy presents an opportunity for scholars to explore it from a wide range of aspects and promote discursive diversity. This has arguably occurred when the region of study is North America or Western Europe, where studies have been done on the ethics, managerial culture and feasibility of translating publicly-funded science and research findings to the market by scientific discipline or departmental structure (e.g. Fassin 2000, De Jonge and Louwaars 2009, Winn 2013, Meyer 2003, Ambos and Birkinshaw 2010 and Jong 2006). On the other hand, referencing habits may also promote the most dominant (or frequently-cited) works from each reference discipline and marginalize others. In the discourse on GCC economies, the questions I address are: how is knowledge built? How do prior works manifest in later works? How do these factors affect discursive trend and evolution on topics related to GCC economies?

### Scope of study

To answer these questions, I define the reference disciplines as follows:

1. Theory of entrepreneurship (on what character and circumstances are conducive to the formation of successful SMEs),
2. Management sciences (on the idea that such individualities can be aggregated onto a level that predicts which societies are more likely to become productive than others), and
3. Economic development of the Middle East (on growth, standard of living and composition of economically productive sectors in a country), and
4. Political economy of Middle Eastern hydrocarbon states

Works on knowledge economy will be categorized as a subset of that on economic development – in particular, the kind of economic development with a high “trophic depth”<sup>6</sup> and low substitutability, supposedly achieved through the formation of SMEs that are characterized by “innovation”, “technological sophistication” and “education”. Furthermore, works on “innovation” and “entrepreneurship” will be aggregated and categorized under “knowledge economy”, as the former two are a prerequisite for the latter.

In the following chapters, I conduct a qualitative discourse analysis of existing literature to identify a number of themes that recurrently appear in the discourse on entrepreneurship and knowledge economy in GCC states, and argue that:

1. This discourse strongly draws on the idea that there exists a “national” culture or mentality, as perpetuated by the hegemonic discourse in theories of entrepreneurship,
2. The use of RST perpetuates Orientalist stereotypes of the “lazy native” that remains unproblematized because they are presented under the guise of economic rationality, and
3. This discourse become ideologized through the dichotomous representations of the “entrepreneur” versus the “rent-seeker”.

Subsequently, using quantitative methods, I investigate to what extent the above forces influence in a measurable manner: (1) how scholars select the topic or research question to address in their work,

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<sup>6</sup> “Trophic depth” is used here to refer to the length of the value chain of a product or service, or how many industrial sectors/layers in the economy are involved in the delivery of the product or service

and hence, (2) how the discourse on political economy, economic development and entrepreneurship in the Arabian Gulf has come to and tends to evolve.

## Chapter outline

In chapter 1, I cross into the theory of entrepreneurship and review dominant narratives on the “ideal” personal characteristics of the innovative and entrepreneurial individual. I aim to demonstrate that the “entrepreneur” is a social, discursive construction and that its applicability should not be universal. Subsequently, I draw attention to the postulation that there exists a “national culture” with which business productivity varies from one society to another. Hofstede’s cultural dimensions theory arguably normalized national-level aggregation of individual beliefs to create a form of collective psychology that explains variations in the professional performance among citizens of different countries. I argue that this is merely a rationalization of old Orientalist stereotypes that, while not unprecedented in topics on the Middle East, has not frequently been highlighted in the discourse on innovation and entrepreneurship. Consequently, hegemonic frameworks in the fields of (cross-regional) management and theory of entrepreneurship, as products of Western knowledge production, have become mechanically incorporated into the discourse.

In chapter 2, I make a similar analysis of RST as a framework in political economy which haunts topics on the Arabian Gulf since it was first conceptualized by Mahdavy (1970). The chapter briefly reviews discursive trends in RST literature in terms of two prevalent postulations that, along with hegemonic narratives in theory of entrepreneurship, perpetuate and reinforce a prejudicial characterization of GCC citizens. I firstly address the popular assumption that there exists a social contract between state and society in which political legitimacy is bartered for economic benefits, and the limitations of the rigid and heavily *homo economicus* lens through which RST perceives the nature of state-society relations in rentier states. Secondly, I discuss the rentier mentality postulation and how its anecdotal nature allows for it to be appropriated in various contexts, thereby, serving as a rationalization for the myth of the “lazy native” who is “indolent”, “backward” and “requiring assistance to climb the ladder of progress” (Alatas 1977: 8). I aim to illustrate how both assumptions strip human agency, commodifies personal motivation and portrays GCC citizens as intrinsically less capable of positive work performance, innovation and meaningful economic productivity.

The first two chapters are therefore:

1. an initial literature study to identify what hegemonic narratives exist on entrepreneurship and political economy in the Arabian Gulf, respectively, and
2. a qualitative analysis of what role they appear to play in shaping the discourse on entrepreneurship and knowledge economy in the Arabian Gulf.

While chapters 1–2 employ a qualitative approach, chapter 3 outlines the more quantitative approach applied in chapter 4. The citation network of publications on political economy, economic development, entrepreneurship and knowledge economy in GCC states are plotted, and several indicators for research behavior and discursive evolution will be computed. Given the scope of this thesis and resource limitations associated with accessibility of publications in the humanities and social sciences (see chapter 4), this will be conducted as a pilot study. The outcomes will subsequently be compared to the observations made throughout chapters 1–2 in chapter 5.

## Precedent for quantitative literature study

While qualitative literature analysis has long been the norm in the humanities, the venture of mathematical and physical sciences into other disciplines has introduced additional tools to uncover

underlying interactions between actors in complex networks (e.g. Tremayne 2014, Solée et al. 2013 and Garlaschelli and Loffredo 2005). Among others, citation networks have been studied to examine how research problems are selected (Rzhetsky et al. 2015) and information flows between scientific journals (Mones, Vicsek, and Vicsek 2012). Mones, Vicsek, and Vicsek (2012) examines which scientific journals contain publications that have the most access to other publications in the network. Meanwhile, Rzhetsky et al. (2015) plots a space of molecular permutations and, through publications, examines which of these scientists chose to study. The authors come to the conclusion that research strategies tend to be conservative and concentrated around certain important molecules which, while advancing scientific careers (presumably through a higher likelihood of publication), “slow scientific advance, especially in mature fields, where more risk and less redundant experimentation would accelerate discovery of the network” (Rzhetsky et al. 2015).

More recently, the use of computational instruments in indexing and interpreting the vast and growing collection of scholarly sources and publications in the humanities is increasingly emerging as its own discipline (Berry 2012). Digital humanities, as it has come to be called, arrived in two waves – quoting Schnaap and Presner’s Digital Humanities Manifesto 2.0: “The first wave of digital humanities work was quantitative, mobilizing the search and retrieval powers of the database, automating corpus linguistics, stacking hypercards into critical arrays. The second wave is qualitative, interpretive, experiential, emotive, generative in character. It harnesses digital toolkits in the service of the Humanities’ core methodological strengths: attention to complexity, medium specificity, historical context, analytical depth, critique and interpretation” (Berry 2012: 44).

In the social sciences and humanities, computational network analysis, text mining and machine learning algorithms have been applied to, for instance, identify public sentiment on topics such as the Syrian refugee crisis (e.g. Öztürk and Ayvaz 2018), predict the result of general elections (e.g. Tumasjan et al. 2010 and Chung and Mustafaraj 2011) and map the active proponents of digital humanities as a discipline (e.g. Grandjean 2016). The coming and further sophistication of digital humanities is arguably inevitable, as digitization allows research to bypass the (physical) constraints associated with a print culture. An increase in the accessibility of information along with the introduction of new cross-disciplinary methodologies serve as an opportunity for scholars to expand the scope of their research and innovate in how they choose to produce knowledge. This thesis embraces a digital humanities approach.

Using a pre-defined seed of works, a citation network grown and analyzed to identify potential commonalities between them and which works have been particularly influential in shaping the discourse on the Arabian Gulf. Its purpose is to be complementary to the qualitative discourse analysis that is done alongside to it – or what is often distinguished as “close” reading as opposed to the “distant” reading in the discussion of digital humanities<sup>7</sup>. Needless to say, this method and its validity as a tool for post-colonial discourse analysis call for extrapolation and refinement by further studies, which will be further discussed in chapter 5. As such, this thesis will be suggestive rather than exhaustive in its post-colonial reading of the hegemonic narratives in which GCC economies are often discussed.

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<sup>7</sup> See e.g. Liu (2012) and Moretti (2013)



## Chapter 1. The ideal entrepreneur

Over the recent decades, entrepreneurship has come to regain its popularity in economics literature. Since Schumpeter's theory of creative destruction, relatively few efforts have been directed towards building a comprehensive theory of entrepreneurship in terms of how the action contributes to market dynamics and macro-economics in general. The conceptualization of the entrepreneur as the engine of economic growth has not convincingly penetrated mainstream discussions on industrial evolution and economic development, leaving them largely reliant on mechanical descriptions of market forces and quantitative methodologies that treat growth processes as though it is a given natural phenomenon. This illustrates a longstanding tension between microlevel analysis in terms of individual human behavior and Adam Smith and Friedrich Hayek's "invisible hand" mechanism that perhaps naturally led to a vernacular of equilibrium models.

The fading end of the spectrum is the discourse in which the entrepreneur is both functionally and symbolically perceived as the driver of economic development. Kirchoff (1992) described it as the "death" of the entrepreneur, due to the separation of microeconomics and macroeconomics. The 1970s crisis of capital accumulation, accompanied by the emergence of evangelical neoliberalism, reinstated the emphasis on individual agency in economic policy discourse. The particular appeal of SMEs due to their perceived efficiency in job creation (arguably along with a moral valorization of productivity and deregulation) drew attention to questions of how to stimulate entrepreneurship and promote an enterprise culture (Casson 2010). As result, despite its considerable absence from twentieth century mainstream economic theory, it would seem that temporal needs have allowed "methodological individualism" to persist in more recent and growing discussions on what makes an entrepreneur.

This theme in particular will return as an implicit yet deeply-embedded theme in the literature on GCC economies. The existing literature on entrepreneurship is sizeable and highly diverse, contributed to by economists, social scientists, policy makers and perhaps more recently, Middle East analysts also. Fortunately, the focus of this thesis lies mainly in the collective characterization of the individual deemed qualified to be an entrepreneur and the application thereof in a Middle East-specific context. Thereby, much of the neoclassical works on entrepreneurship becomes less relevant, and I will focus on hegemonic frameworks that approach the topic in terms of personality traits and "cultural" influence. In general, this portion of the literature can be divided into a number of streams based on how the entrepreneur is defined – whether in terms of the economic activities that they perform or through a more institutional perspective, in terms of conductivity to the creation of SMEs. The resulting representation of the entrepreneur consequently holds an important political economic role as illustrated in later chapters.

### 1.1 Personification of economic productivity

The functional approach typically leads to a definition of the entrepreneur based on their activity and an analysis of personal qualities necessary for a successful performance. The most influential example is perhaps Schumpeter's entrepreneur. He/she/they are an innovator who recognizes and realizes opportunities, and causes market disruptions that ultimately force industrial evolution. As such, he/she/they must possess a specific set of desirable qualities. For instance, persuasiveness, determination and sound "intuition" are necessary to overcome skepticism in introducing new solutions (Schumpeter and Opie 1934). He/she/they are intrinsically revolutionary, a pioneer capable of opening new markets, and an idealist driven by a sense of self-achievement rather than economic incentive. Most importantly, Schumpeter asserts that entrepreneurial capability is a talent, and such personalities comprise an exclusive group in society (Schumpeter and Opie 1934). To innovate is purportedly not within every person's capability as most people are unimaginative

(Shackle 1979) or lack determination (Baumol 2004). Knight (2012) emphasizes the entrepreneur's role as one who bears economic uncertainty, requiring that he/she/they are confident, risk-taking and capable of improvisation. Kirzner (2015) view the entrepreneur in terms of his/her/they moderating function in the determination of economic equilibrium. Variability in the price of goods are caused by information asymmetry and continuous discoveries made by entrepreneurs. Kirzner's entrepreneur is therefore active, alert and constantly seeking and adopting new knowledge in order to gain competitive advantage. Casson refines existing models by combining the previous functions of the entrepreneur as innovator, uncertainty bearer, resource coordinator and decision maker. Casson's entrepreneur possesses "good judgment" in that he/she/they are "socially intelligent" and efficient at collecting and processing useful information. He/she/they are a quick decision maker, yet waits for the optimum amount of information required to reduce risk. He/she/they are self-aware, yet subconsciously superior and therefore unable to codify his procedures. The entrepreneur is intrinsically a "modernizer" (Casson 2010) and clearly possesses multiple talents, prevailing at all stages of project management. As such, his/her/their behavior is limited to innovating or improving.

Thus, perhaps predictably, Casson's entrepreneur does not necessarily own a firm – rather, he/she/they are defined by his/her/their function, i.e. "an entrepreneur is what an entrepreneur does" (Casson 2010: 142). The entrepreneur is a personification of his/her/their economic function/productivity. The entrepreneur's profession is then absorbed into the personality of a capitalist protagonist. As such, the existing framework for entrepreneurship research cannot be considered in isolation from implicit ideological biases, especially when it is applied cross-regionally. Moreover, the study of entrepreneurship has inevitably become the study of success, offering little agency to (nascent) entrepreneurial settings that may not necessarily conform to those described in the literature or were not borne out of Western capitalism. Indeed, throughout most of the existing literature, the entrepreneur is depicted as an exclusive, intrinsically superior class with a virtuous economic function in society. Entrepreneurs "innovate" while others "preserve the status quo" – "a competent entrepreneur will out-perform a non-entrepreneur who will in turn out-perform an incompetent entrepreneur – who is likely to fail outright" (Casson 2010: 148). With such narrative, it is difficult to see what better aspirations exist than to become entrepreneur, in what aspects of life such a romanticized character would fall short of success, and to what extent such personality profiles can be applied universally.

## **1.2 A hegemonic discourse of national culture**

Such characterization of the entrepreneur – a personification of the ideal individual's economic function in Western capitalism – spurred efforts to aggregate it onto higher organizational levels. Over the years, the institutional approach seems to have increasingly focused on finding (desirable) cultural traits, or a distinct "entrepreneurial" or "innovative" culture. Several papers that would strongly influence modern management sciences suggest a relationship between what is often dubbed as "cultural values" and innovation and entrepreneurship. The early 1990s saw an increase of scholarly eagerness to classify or explain observed differences in rates of innovation and entrepreneurship in terms of nationality. Why and how the question of this variation came to adopt such vernacular is worth questioning. A brief genealogical overview of this particular branch of research may provide a logical starting point for examining what recurring themes and hegemonic narratives exist. This might allow one to identify patterns in the production of scholarly work that may have facilitated the persistence of such narratives or their permeation into other fields of research (see chapter 2).

## **1.3 Hofstede's cultural dimensions theory**

Hofstede (1983) is a pioneer in the discourse that relativized culture and organizational management techniques according to one's nationality. The extent to which the work shaped the discourse in

region-specific research on entrepreneurship and management techniques is significant. Hofstede suggests that management techniques in organizations can be optimized according to the culture of the (national-level) society in which it operates. Through its proposed cultural dimensions theory, it introduces measures such as “individualism versus collectivism”, “low versus high power distance”, “femininity versus masculinity”, and “low versus high uncertainty avoidance” as proxies for “cultural values”. Value statements were obtained from surveys disseminated among employees of computer manufacturing company IBM subsidiaries in over 40 countries. Scores were then ascribed to the respective countries, placing them on a comparative scale relative to each other. The findings suggest that there is substantial variation in these scores, thereby cultural values that manifest on a national scale, hence implying that management approach must be adjusted to the country in which an organization operates or the nationality of the majority of its employees. The main result of the work is the framework provided by Hofstede’s cultural dimensions theory as a tool to achieve locally optimum cross-cultural communication and management techniques within a corporation or organization.

Despite its epistemological flaws (discussed in the next section), the framework for cross-cultural communications proposed by Hofstede gained far more supporters than opponents (Jones 2007). Many academic works followed the discursive direction it had set, and even among its critics disagreement is often based on inconsistencies in empirical findings rather than epistemological grounds (e.g. Shane 1993, Pinillos and Reyes 2011 and Rinne, Steel, and Fairweather 2012). The concept of “national culture” appears to be deeply instilled in the discussion on stimulation of innovation and entrepreneurship.

A number of influential works attempted to quantify Hofstede’s cultural dimensions against their own proposed proxies for rates of innovation and entrepreneurship. Shane (1992) correlates the levels of individualism and power distance to the per capita rate of innovation (in terms of number of patents granted) to nationals of various countries as a proxy for inventiveness. Departing from the hypothesis that social hierarchy and collectivism are inversely proportional to creativity, Shane (1992) makes several assumptions about the consequences such characteristics might have on innovation. Namely, that societies based on social hierarchy (1) suffers from hampered communication and information that would be conducive to innovation, (2) emphasizes rules and procedures over trust, which creates a work ethic that is less inclined to do the hard work necessary for innovation, and (3) seek to actively obstruct innovation so as to secure the existing order. “Psychological characteristics such as independence, achievement, and non-conformity”, which have been found to encourage innovation are purportedly more likely in “individualistic” societies (Shane 1992: 30). The main findings of his work include a positive correlation of individualism and a negative correlation of power distance with national rates of innovation.

Based on the empirical results, two conclusions are drawn: (1) “some societies might have a cultural comparative advantage in inventiveness”, and (2) “the same cultural values that operate on the national level operate on the firm level”. It is to be noted that the author extends the applicability of his assumptions into corporate environments and fails to take into account other, potentially significant, circumstances that may affect the outcome – be they intricately “cultural” or as pragmatic as work environment-specific procedures. Shane (1993) reasserts the view that “If countries wish to increase their rates of innovation, public policies that increase the amount of money spent on research and development or industrial infrastructure may not enough. Countries also may have to change the attitudes of their citizen” (Shane 1993: 67). Referring to societies that lack individualism and score highly in power distance and uncertainty avoidance, Shane states that they “...may spend money on research and development and industrial infrastructure, but still fail to achieve the desired results in terms of rates of innovation because of the beliefs of their citizens”

(Shane 1993: 67). As later chapters will show, these culturalist views in particular recur as a core underlying assumption in the discourses on economic development, entrepreneurship and knowledge economy in the Arabian Gulf.

Rinne, Steel, and Fairweather (2012) revises Hofstede and Shane's findings by plotting national scores on the INSEAD Global Innovation Index (GII) against Hofstede's cultural dimensions of individualism and uncertainty avoidance. Williams and McGuire (2010) examine the influence of culture on national prosperity. The claim is that the latter is facilitated by innovation, whereby both "economic creativity" (or the generation of ideas) and "innovation implementation" (or turning ideas into action) are necessary. Hofstede's power distance, uncertainty avoidance and individualism are used as measures of cultural values. Using patents, scientific publications and R&D spending as measures of innovation, the finding is that there is a direct relationship between culture and economic creativity, which in turn affects the rate of innovation implementation and hence national prosperity.

Many more scholars have continued this tradition of aggregating an established set of personality traits onto a national level, slightly modifying existing independent variables or increasing the number of proxies for their dependent variables, and ultimately reaching conclusions that are similar to those of previous works. For instance, Mueller and Thomas (2001: 66), claim that individualism fosters "strong entrepreneurial values that promote self-reliance and independent action while collectivistic cultures do not." Pinillos and Reyes (2011) use data from the Global Entrepreneurship Monitor to correlate similar variables to a country's level of economic development, providing the rationale that an economy which is primarily based on agriculture enforces a collectivist culture (as it is structured around families), while industrial economies gradually undermine the aspect of culture that emphasizes collective membership as families migrate to seek opportunities at large firms. Along similar lines, Stephan and Uhlaner (2010) distinguish between "performance based culture" and socially supportive culture, in which the former emphasizes individual accomplishments. Finally, Hayton and Cacciotti (2013) provide an extensive review of previous works that have studied the influence of cultural values on rates of innovation, rate of new firm formation and individual characteristics of entrepreneurs. The authors examine whether the results of a vast and growing amount of research in these topics converge towards a conclusive agreement regarding whether there exists specific aspects of culture that are conducive to entrepreneurial action. Indeed, as their findings suggest, there remains significant divergence in the existing literature.

Yet, the most important question is perhaps how predictable the outcomes of "cultural" approach to innovation and entrepreneurship have been. Namely, post-colonial countries generally underperform in the outcome of these studies, and are characterized as collectivist, risk averse, hierarchical and "strongly religious" and not receptive to innovation (e.g. Hofstede 1983, Shane 1993 and Herbig and Dunphy 1998).

#### **1.4 Recurring epistemological and methodological limitations of the focus on regional culture**

Despite Hofstede's popularity, several points can be raised with regard to both theory and methodology of its research. Firstly, differences in work ethic, customs and performance among employees can be caused by numerous factors both internal and external to the work environment. They may, for instance, vary across individual functions and professional history within a certain corporate department. Work ethic may also depend on the type of corporation (e.g. maturity, public/private etc.) or the industry in which it operates. Given such parameters, Hofstede's sample

group, within its IBM-microenvironment, would have been too exceptional and unrepresentative for national-level aggregation.

Defining culture in terms of nationality is anyhow problematic and a parametrization unfittingly arbitrary for the standards of academic research. Nationality, after all, is defined by legal rights associated with conjectural geographical borders rather than the collective customs of those who reside within them. Amongst others, this issue has been raised by McSweeney (2002), Moulettes (2007) and Ailon (2008), whose critical post-colonial readings of Hofstede's cultural dimensions theory point out the lack of agency given to social minorities and particularly women, who would have been underrepresented in the sample group consisting of sales and engineering employees.

This institutional view of the entrepreneur or productive individual rests on identifying culture as "patterns of thinking" that distinguish one society from another and are transferred within a society from one member to another. It is intrinsic to those who belong to it and impossible to be understood by outsiders (Hofstede 1983). This view, however, fails to recognize that culture is a trans-boundary dynamic set of customary practices, both a product and agent of one's environment – continuously evolving and reproduced through its practice. As Hofstede's framework conceptualizes culture as a permanent, static entity with specific intrinsic characteristics, it strips individuals of agency and portrays them as mere subjects to be managed. While static portrayal of culture has been questioned before (e.g. Shane 1993, Pinillos and Reyes 2011, McGrath, MacMillan, and Scheinberg 1992 and Wennekers et al. 2007), many have merely tried to measure temporal shifts in the cultural dimensions, thus, leaving the theoretical framework unquestioned. As later chapters will show, this is echoed throughout discourses on political economy, economic development and entrepreneurship in the Middle East and Arabian Gulf.

Furthermore, Hofstede's selection of dependent variables arguably perpetuate a dichotomous view of stereotypically more industrialized and advanced societies versus those deemed to be intrinsically less competent and developed. Ultimately, the arbitrary choice of defining culture in terms of national origin is indicative of colonial prejudices – not an unfamiliar theme in Western knowledge production on post-colonial regions (as is arguably demonstrated by continuing discussions built on e.g. Alatas 1977, Said 1978 and Lockman 2009). The scientific methodology is then reduced to a confirmation bias perhaps best summarized in a quote from (Lockman 2009), who argues that there may be scholars "who reject the entire notion of a politics of knowledge and insist that their own scholarly impartiality, critical faculties and good judgment, along with the use of tried-and-true scholarly methods, allow them to produce knowledge that is not informed by any implicit or explicit theory, model or vision of the world but is simply and objectively true. They might be said to take their motto from police sergeant Jack Webb's favorite line in the old television series *Dragnet*: 'Just the facts, ma'am.'" (Lockman 2009: 4)

Finally, one cannot disregard Hofstede's occupation and the role it exercises within a corporation – namely, to assess and govern individuals in order to optimize business performance. Just as Hofstede's framework claims that management methods are not value-free, neither is its purpose. Against the background of Western hegemony in the knowledge production of international management (Kirkman and Law 2005), this is also accompanied by a discomfiting throwback to the collusion between early anthropological sciences and European colonialism (Lewis 1973). Ultimately, the widely assumed objectivity in Hofstede's work has imposed and normalized a vernacular of "national culture" in academic questions of international management, innovation and entrepreneurship.

## 1.5 The Entrepreneur versus the Orient<sup>8</sup>

Ultimately, the two streams literature – the functional and institutional approaches to entrepreneurship – converge on the psychological dimension of entrepreneurship and present a similar representation of the entrepreneurial/productive individual and society. As previous works have noted, entrepreneurship research has come to adopt economic, social, psychological and cultural aspects Ripsas (1998) and Campbell (1992). The institutional approach, which has become established in management discourse, largely presents entrepreneurship and innovation as a behavioral phenomenon. Similar to the functional view, the entrepreneurial individual is romanticized as an innovator. The Entrepreneur is intrinsically driven by self-achievement, hard working, an ode to the male archetype and a glorification of the “rags to riches” self-made man. The Entrepreneur’s personality is ideal to the capitalist cause and “just happens” to more likely occur in the global North. The Entrepreneur comprises an exclusive class of deserved economic and social stature. It embraces stratification between those who have access to knowledge facilities and those who do not; those deemed intrinsically more capable of productivity and performance, and those who are deemed intrinsically less qualified; those who “modernize” and “improve” like Casson’s entrepreneur, and those who are passive and “traditionalists” (Casson 2010: 66).

One may thus conclude that, firstly, existing theories of entrepreneurship, innovation and knowledge economy are applied with multiple standards across demographics. Secondly, that in practice, such views are a rationalization of longstanding colonial narratives of civilizational hierarchy that implicitly continue to inform knowledge production today, and easily depicts the global South as a collective stereotypical lazy “Orient”. The hegemony of such rationality-cloaked Orientalism noticeably dominates the discourse on GCC economies. One such manifestation is the recurring use of RST in portraying “rentier state” citizen’s as the anti-thesis to the Entrepreneur. Other manifestations are arguably reflected in studies that explore the feasibility of stimulating entrepreneurship, innovation and knowledge economy in the region. This has, for example, been done as quantitative assessments of countries’ performance on the so-called knowledge economy “pillars”<sup>9</sup> (e.g. Parcero and Ryan 2016, Shin, Lee, and Kim 2012, Mahroum and Al-Saleh 2013 and Ahmed and Al-Roubaie 2012).

Shortcomings are often linked to the GCC citizen’s supposed lack of motivation to pursue a career that requires more than the minimum effort that will secure a comfortable living, or an intrinsic passivity that attributes wealth to *force majeure* as opposed to labor (e.g. Hvidt 2015, Ayubi 1991 and Beblawi 1987). Yet, no significant effort has been made to explore how existing models of the entrepreneurial/productive individual might apply across different industries in the region, or specifically the knowledge industry. What is often emphasized is merely the distinction between geographical origins or the productive citizen who contributes to the economy by strengthening the private sector against the one who settles for the economically attractive public sector employment. The “desirable” entrepreneurial traits are then made to be all that is *not* the caricature of the benefit-receiving GCC citizen. As such, the Entrepreneur becomes a symbol or identity rather than a profession.

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<sup>8</sup> The Entrepreneur is capitalized as it is no longer a mere title/description. Rather it is a symbol or holds a function that is opposite to the Orient

<sup>9</sup> The World Bank defines four “pillars” deemed conducive to creating a knowledge economy (e.g. adequate presence of information infrastructures) and introduced the Knowledge Assessment Methodology (KAM) to benchmark a country’s “readiness for the knowledge economy” (Chen and Dahlman 2006: 1-4).

## **Chapter 2. The creation of the rent-seeking state and society**

How exactly would discourse on entrepreneurship and productivity shape research behavior in Middle East studies? An examination of academic discourse on political economy, economic development and entrepreneurship in the region would indicate that research behavior is significantly guided by the popular representations of the Arabian Gulf versus the Entrepreneur. More specifically, these representations are perpetuated through a theoretical framework – the rentier state theory (RST) – which guides research question selection along (1) the contrast between the archetypes of the GCC citizen and the Entrepreneur and (2) the implied intrinsic incapability of the Arabian Gulf to progress towards becoming a social, political and economic region supposedly embodied by the Entrepreneur (the “West”).

This chapter provides a brief introduction to RST. Subsequently, through a literature study, it aims to illustrate how RST’s assumptions the aforementioned points shape the discourse on political economy, economic development and entrepreneurship in the Arabian Gulf.

### **2.1 The rentier state theory**

RST has come to occupy much of the discursive space on political economy in the Middle East, especially when it concerns the GCC states. Mahdavy (1970) first conceptualized “the rentier state” in his observation of the growing contribution of external oil rents in the economies of Middle Eastern countries, specifically Iran, over the second half of the twentieth century. In short, the economy of a typical rentier state can be distinguished by several features: (1) the economy largely relies on external rent as opposed to domestic industry, and (2) the state is the main recipient of rent (Luciani 1990). In the case of many Arabian Gulf states, this rent is derived from the extraction of natural resources. The capital-intensive nature of the extractive industry means that the input required from the local economy is often miniscule compared to the rapid rate at which production increases (Mahdavy 1970). The hydrocarbon industry consequently evolves in relative isolation from the rest of the exporting country’s economy (Crystal 2016).

As a result, the public sector in oil production undergoes rapid expansion while other sectors remain relatively underdeveloped. This effect is typically exacerbated by an overrated national currency, as exchange rates are kept artificially high in order for the rentier regime to maximize foreign exchange receipts from hydrocarbon proceeds (Mahdavy 1970). Hence, the rentier state’s economy typically operates through large public expenditure, a vast trade imbalance (when one excludes hydrocarbon exports) and a lack of manufacturing enterprises that would otherwise constitute a productive domestic sector (Mahdavy 1970).

### **2.2 State-centricism and political legitimacy/apathy in RST**

In the context of political economy, RST makes a foundational premise: as external rents run directly to the state and become its primary revenue stream, there is no need for a taxation system. This allows for a state which operates autonomously from society and is unrestrained by accountability. The “allocation state”, as Luciani (1990) calls it, redistributes its accrued wealth in the form of endowments to society, which are subsequently bartered for political legitimacy regardless of the favorability of the state’s policies. In the case of 1950’s Iran, Mahdavy (1970) points out that the political benefits associated with oil rents allowed for regime security despite that it perpetuated dysfunctional economic development. These economic and political impacts of oil are associated with the so-called “resource curse” (Ross 1999).

This phenomenon forms the basis for RST's description of state society-relations in hydrocarbon-rich Middle Eastern countries, especially in the Arabian Gulf. The role of rent allocation is presented as the main if not sole determining factor in the dynamic. The premise lies in that the stability and character of state formations rest on the ability of the regime to acquire sufficient resources to ensure its survival (Luciani 1990). As such, the state's economic function becomes a tool of political expedience and its rent-based revenues a means to consolidate the rule of the regime. In the rentier state, the regime is subsequently accepted for its economic function – namely, the mediator which citizens need in order to tap into oil rent (Luciani 1990). Political rights are thereby substituted for regime-endowed benefits, and citizenship becomes merely an economic expediency (Puranen and Widenfalk 2007). The institutionalization of rent-allocative economic practices by the state – in the form of an elaborate welfare system – supposedly conditions society towards rent-seeking behavior. “Loyalty” to the system (as opposed to individuals in power) is therefore popular among that vast majority of the population (Luciani 1990). In this manner Beblawi and Luciani's conceptualization of the rentier state, which became predominant in later RST works, differed from Mahdavy (1970) in a subtle yet important manner. Namely, the “rentier state” came to signify “state apparatus” rather than an economy or a country (Rutledge 2014). Along with the distribution of wealth, the state also disseminates its authority.

### 2.3 The state of the field and RST

Some scholars have revised or criticized early RST works for its reductionist approach, economic generalizations and assumptive conclusions (e.g. Hachemaoui 2012, Springborg 2013 and Di John 2011). Gray (2011) offers a chronological overview of developments in RST literature, categorizing them under three different phases: first phase (classical RST), second phase (specialized and conditional RST), and third phase (late rentierism). Each successive phase is a reply to criticisms of the former being an overly simplistic model (Gray 2011). What Gray calls specialized and conditional RST practically increased the number of variables in the existing model.

In contrast to classical RST, which almost exclusively explains political and economic development in terms of the state and society's relationship to hydrocarbons, “second phase” RST combines the theory with other existing frameworks and takes into account historical and geopolitical contexts specific to the region (Gray 2011). Amongst others, Yom and Gause (2012) and Martinez (2014) have pointed to the intervention of foreign powers in securing their energy interests through state clientelism, thereby contributing to the dynamics of regime security. Furthermore, the state is no longer depicted as entirely static, free of interest and requiring no economic policy. This is to accommodate the criticism that a responsive state is needed to appease existing threats of opposition, whether it is achieved through financial endowments, nation-building campaigns, or other tools of legitimization.

“Late rentierism” refines the previous model further by suggesting that the classic rentier state has evolved into a more sophisticated version of itself. The state has learned that the effects of globalization and the emergence of socially and economically disruptive technologies are difficult to moderate. It has thus, ironically, become more “entrepreneurial” and innovative in that it is slowly but continuously finding new ways to maintain its dominance. Not unlike a business firm, the state identifies changes in the social, political and economic landscape, strategizes and adapts to ensure the regime's longer-term sustainability. Among others, DeVriese (2013), Lynch (2011) and Janardhan (2011) address the emergence of new media technologies as a phenomenon that requires political strategy, and which some regimes have adopted as a means of communication. Furthermore, Peterson (2009) suggests that the post-1970s oil bust taught Arabian Gulf states the harsh consequences of having a hydrocarbon economy. In response, they have devised



diversification strategies among which pursuing a knowledge economy through investments into higher education and promotion of entrepreneurship is one.

Yet, despite these developments in RST, the framework has arguably remained “state-centric” in its explanation of state-society relations in the Middle East. Society is still depicted as though it exists in a vacuum, contained by the regime, which moderates forces that threaten to bring entropy to the system. Importantly, these forces are external, uncontrollable and pre-destined. Typically they include the depletion of hydrocarbons, demographic changes, economic liberalization and the adoption of new (communication) technologies such as online social platforms (e.g. Beck and Hüser 2012 and Lynch 2011).

Thus, while perhaps RST has gradually come to offer more agency to Middle East rentier regimes, citizens remain relatively left out of the picture. One reason may lie in the fundamental assumption that political legitimacy can be bought. This implies two mechanisms: the purchase of consent (or “rentier effect”) and financing effective means of repression through forceful channels such as internal security forces (or “repression effect”) (Ross 2001). As result, much of RST literature on the Middle East concerns the effects of oil rents on democracy (e.g. Morrison 2009 and Herb 2005), regime security (e.g. Smith 2004 and Ross 2001) and economic development (e.g. Di John 2011, Jensen and Wantchekon 2004 and Kropf 2010).

This discursive trend persists in both early and more recent RST works, with research methods becoming increasingly quantitative, thereby simplifying and mechanizing fundamental questions pertaining to complex human behavior even further. For instance, in a time-series analysis on 113 different countries (Ross 2001) finds that oil hinders democracy through the rentier effect, repression effect and “modernization effect”, which states that oil-based economic growth hinders social and cultural changes associated with democratic transitions. Morrison (2009) extends this effect to all nontax revenues. Similarly, Jensen and Wantchekon (2004) find that resource wealth leads to higher government consumption associated with consolidating political support, and is negatively linked to rate of economic growth and “political liberalization”. Tsui (2011) holds a similar view on oil discoveries, correlating number of barrels to percentage point reductions in democracy level.

Ulfelder (2007) argues that time-series analyses which collectively and indiscriminately incorporate data sets from multiple countries over multiple years assume that democracy is a continuous process determined by a unique set of variables. A model is therefore used in which transition to democracy is considered a discrete variable, given by the event in which an elected leader replaces one who was not. While raising a valid concern about existing models, the author nonetheless stops short of questioning how transitions come to manifest and to what extent they can effectively be generalized using a limited set of statistical variables. Smith (2004) links oil wealth to regime durability and lower likelihoods of social protests and civil war. Instead, the results “counter intuitively” find that the latter is correlated to democracy. The data is normalized for the “repression effect”, suggesting that oil wealth does not uniquely operate through, for instance, military funding in withstanding potential opposition, but also by building strategic social coalitions.

Meanwhile, through similar time-series analyses, other scholars (e.g. Herb 2005 and Oskarsson and Ottosen 2010) find insufficient evidence for or temporal variability in the negative link between resource rents and democracy level. Additionally, Okruhlik (1999), Ross (2013), Karl (1997) and

proponents of the “oil-as-spoils thesis”<sup>10</sup>, or the theory that civil conflict is driven by resource greed (e.g. Collier 2004), would contrarily suggest that oil rent is inversely correlated with regime durability.

A common denominator between these predominantly quantitative methods is the assumption that correlation equals causation. In Barro (1999), Herb (2005) and Ulfelder (2007), for instance, percentage Muslim population serves as an independent variable for perpetuation of autocracy – evidently, an arbitrary selection based on the stereotype of the Islamic Oriental despot. Furthermore, among these statistical studies, it would appear that research question selection have come to evolve along small methodological variations of each other rather than meaningful theoretical or discursive innovation. While this potentially allows for more publications, it risks that problem selection in research will become increasingly conservative over time.

While theoretically no consensus exists within specialized discourses on the impact of rents on economic development, democracy and regime security, the general point of departure is that a relationship exists, and discrepancies of opinion are most often based on differences in (quantitative) empirical findings. Even when theories conflict – as exemplified by the “oil-as-spoils thesis”<sup>11</sup> – the impact of resource rents on political development remains central to the vernacular. Abulof (2017) highlights RST scholars’ relative lack of consideration for the balance between moral versus material aspects of political legitimacy. Indeed, the distinction between popular consent and practical obedience is left relatively unexplored among recent, more quantitative works – thereby, commodifying the moral intricacies of civic engagement and public consent.

## 2.4 The anti-thesis to the Entrepreneur and undeserved wealth

Through the political apathy ascribed to the Rentier<sup>12</sup>, he/she/they become the anti-thesis to the Entrepreneur – settling for minimum-effort economic security and satiated by mere patronage as opposed virtuously driven towards challenges and constant self-improvement. As higher personal motivations do not exist in the Orient, he/she/they are placed outside of Schumpeter’s realm of methodological individualism and, hence, the economy within which innovation and entrepreneurship can occur. Knowledge acquisition, technological innovation, hard “work” and creative disruption, or any disruption at all, therefore intrinsically do not belong to the oil-rich Middle East countries.

This narrative persists despite the presence of what is often associated with “modernization” or “Westernization”. For instance, the consolidation of the modern nation-state – the centralization of power and its mediation through institutions, or what Giddens (1984) structuration theory might describe as “allocative” and “authoritative” resources<sup>13</sup> and Weber (1991) might characterize as

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<sup>10</sup> Smith (2011) refers to the oil-as-spoils thesis which “maintains that the presence of oil revenues or other extracted natural resources in a country causes political instability by presenting an attractive set of spoils to potential rebels or state-breakers or by creating resentment over unequal distribution of oil rents, which can spill over into conflict over the pattern of distribution.” (Smith 2011, p. 19-20 )

<sup>11</sup> See footnote 9

<sup>12</sup> The Rentier is capitalized, as it is no longer a mere title/description. Rather it is a symbol or holds a function that is opposite, yet similar manner to the Entrepreneur

<sup>13</sup> In theorizing the structuration of society, (Giddens 1984) conceptualizes “structures” from which agents draw social performance as “allocative resources” (defined capabilities to generate “command over objects, goods or material phenomena” and “authoritative resources” (defined as “transformative capacity generating command over persons or actors”)) (Giddens 1984: 33)

“modern officialdom”<sup>14</sup> – was apparently insufficient to change the image of a backward Arabian Gulf in both public and academic discourses. This, despite the emergence of a new era of economic development and political rise, which a 1974 article in *The Washington Post*, titled “New Power of the Arabs at the UN” describes as follows:

“This is the year of the Arabs at the United Nations... an entire special session of the General Assembly was devoted (again for the first time) to an issue raised by Arabs: economic relations between developed and developing states... [the issue] will no longer be treated in the... narrow and tidy “development” corner in which the developed states had previously confined it... Years of huffing and puffing by the Russians (and Chinese) had failed to bring the struggle of haves and have nots to center stage at the United Nations – a result consummated in a matter of months after Arabs initiated an oil embargo in the Mideast war of 1973...” (Rosenfeld 1974: A24)

Indeed, a certain perplexity persists across time in both public and academic discourse with whose hands this fortune had fallen into, and it is unclear which fuels one or the other. For instance, a 1976 *New York Times* article titled “Oil Money Developing the Desert” describes Abu Dhabi as a “huge fountainhead of oil” with a ruler who is said to keep “a board of paper money under his bed, where it was partly consumed by mice”, and where “...development policy is one of “building things, a lot more things, out in the desert” (Pace 1976: 43). Furthermore, in a 1977 article titled “Oil Riches Change the Mideast Landscape”, the imagery of Saudi-Arabia is accessorized with a superfluous description of a portrait of King Faisal at a public facility: “The royal Saudi regime spends in suitably regal style: one new hospital in Riyadh, the isolated Saudi capital, is decorated with a large portrait of King Faisal... The portrait is a mosaic of semiprecious stones with inset diamonds glinting in its eyes. The Saudis’ overall development planning is similarly lavish” (Nogues/Syigma 1977: IES11).

The list of articles that convey myopic gratuity as synonymous with lifestyle in the Arabian Gulf goes on. Central to the image attributed to the region is not only the suddenness of its aesthetic and infrastructural transformation, as titles like “*All the glamour of the Arabian nights*” (Frater 2002), “*Unradical Sheikhs who Shake the World: Much more wealth than they can cope with*” (Sheehan 1974) and “*How will the Arabs spend their surplus petrodollars?*” (Lewis 1979) would suggest – i.e. the Rentier’s undeserved “piece of the pie”. These were “desert people [brought] to the reality of the 20<sup>th</sup> century” (Montgomery 1975: 10), newly-turned “oil men or financiers with falcons as pets” (Rapoza 2014) and “swashbuckling relics of a bygone era” (Lippman 1979: A14) suddenly exposed to “modernization”. These were mere rentiers who were utilizing accidental wealth and power status through money-drunk decadence.

A similar perplexity exists among scholarly works, as what is habitually highlighted is the alleged paradox or contrast/necessary reconciliation between the appearance of a “metropolis” characteristic to the “more developed” world, and the tribal, unenlightened and apathetic nature of political leadership and psyche in the Orient. Cooke’s (2014) *Tribal Modern* is arguably an example hereof. In trying to argue the opposite, the author ironically reproduces the popular view that tribal tradition and culture are contrary to the Western-accentuated concept of “modern”. While offering an alternative perspective on the “tribal” as a modern tool for nation building, the author draws on banal images of the “Muslim Cosmopolitanism” with its paradoxes of Gucci stilettos versus

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<sup>14</sup> In his 1946 Munich speech on “Politics as a Vocation”, Weber describes “modern officialdom” as the organization of politics into vocations, conducted by specialized individuals whose functions are determined by rules and structures (Weber 1991: 87). This is arguably an essential property, or necessary structuration process of the modern state’s bureaucracy as we recognize today – i.e. an important feature of “modernity”.

traditional 'abayas and camels versus cars and skyscrapers. As another example, Jones' (2017) *Bedouins into Bourgeois* investigates ruling elites' ambition of neoliberal policy making and traces it to their emotional experiences of studying in the West, which supplied them with "powerful, sometimes uncomfortable, ideas about how their own societies underperform and fail to win international respect" (Jones 2015: 25). One elite reportedly stated: "...[people in the West] rely on themselves to develop a career and to develop themselves. If you can't do these things, it is difficult for you to develop your character..." (Jones 2015: 32). Ultimately, it is these impressions that form the basis of the "rentier mentality" theory – an articulation of a hypothetical folk psychology that proliferates through all layers of the rentier society.

## 2.5 The rentier mentality and its appropriations

The societal consequences associated with rentier economies are widely referenced in both early and recent RST literature. The state's practice of passively earning income through external rents is propagated through the elaborate wealth allocation system it has established, and manifests in the form of a specific collective mentality referred to as "the rentier mentality" (Beblawi 1987). This mentality purportedly originates from a break in the work-reward causation such that there is an over-reliance on "unearned" income (Yates 1996). "Work ethic" ceases to exist as wealth is subsequently dissociated from effort and sacrifice (Levins 2012).

Beblawi (1987) illustrates the normalization of rent-seeking throughout society through various examples in which citizens of the rentier state have habituated to living off arrangements of "unproductive" income such as the *kafala* system, business ownership privileges and various government endowed benefits. In this manner, evidence for the existence of a collective rentier mentality remains mainly anecdotal. Often an inclination towards employment in the public sector is regarded as an indication of lack of ambition (e.g. Levins 2012, Kayed and Kabir Hassan 2011 and Yates 1996). Fortune is often assumed to be attributed to metaphysical forces (e.g. Yates 1996, Puranen and Widenfalk 2007 and Hvidt 2015), while common expressions of gratitude are understood as religious references herein. For instance, Ayubi (2003: 163) states: "Changes in people's social fortunes are likely to be attributed to metaphysical forces such as luck (*hazz*) or fate (*qadar*), or even blessing (*baraka*)."

Yet, despite its ubiquitous use in explaining GCC countries' (national) labor force deficit, few works have tried to unpack or empirically explore the rentier mentality postulation. Indeed, the reference to a "mentality" suggests that it belongs to the fields of psychology or anthropology, and political economists will try to avoid painting societies with a single brush (Kropf and Ramady 2015). Thus, its use is often perfunctory and fluid in explaining various political, economic and social phenomena in resource-rich post-colonial countries.

For instance, proponents of the resource curse thesis have both theoretically and empirically tried to explain the phenomenon through the existence of a "rent seeking" culture (Deacon and Rode 2015), regularly citing it as an obstacle to wealth creation and economic growth (e.g. Sachs and Warner 2001 and Stiglitz 2015). Herein, the rentier mentality is allegedly accountable for the misallocation of valuable human capital, as potentially creative and "entrepreneurial" individuals direct their talents towards rent seeking instead of wealth creation.

Other references to the concept can be found in Ayubi (1991), Karmani (2005), Levins (2012) and Yates (1996). Citing a 2003 UNDP report, Karmani (2005: 91) refers to a mentality "...orientated towards spending and acquisition where the onus is placed almost entirely on foreign experts to work out crucial far reaching policy initiatives" in explaining the spread of the English language in

the Arabian Gulf and its role in constraining political Islam. Levins (2012) highlights the rentier mentality as an integral factor in the survival of absolute monarchies as benefactors in the Arab World. Yates (1996) applies the notion to oil-rich sub-Saharan African countries, describing it as a mentality, which confuses allocation with development and believes that solutions to economic problems can simply be purchased.

Ayubi (1996) relates the concept to the emergence of political Islam in Arab rentier states. The author argues that perception of income, status and class identity are distorted, as fortune is attributed to *force majeure* rather than labor. Subsequently, economic marginalization is more easily perceived in moral terms, and political Islam emerges as an alternative ideology to the state capitalism that serves ruling elites yet alienates other segments of society (Ayubi 1996). Meanwhile, Hvidt (2015) discusses motivational challenges as a cause for underperformance of GCC states in the Education and Innovation pillars on the Knowledge Economy Index. “Lack of incentives to pursue learning and innovation” as a manifestation of the rentier mentality is emphasized as a key obstacle to acquiring the necessary human capital in order to transform a rentier economy into a knowledge economy (Hvidt 2015: 27).

While few works challenge the use of the “rentier mentality” thesis (e.g. Hachemaoui 2012), most often they merely make a mention its assumptive nature. Other works express caution over its use, yet fall short of questioning its epistemological basis. For instance, Yates (1996) distinguishes the “rentier mentality” from an “Orientalized misconception of a ‘lazy native’,” rather, describing it as a mentality that “confuses” the allocation of oil revenues with “development”. Yates (1996: 205) specifies that the purpose of the “rentier mentality” is “not to provide some kind of totalizing argument about how something in the national culture keeps it underdeveloped.” Yet, most studies appear to be comfortable with validating such a generalizing assumption when it is presented as an economic phenomenon and under the pretext of citizens as economic actors. Consequently, “rentier mentality” becomes a euphemism for “Arab laziness”, used as reductionist analysis of economic stagnation.

## **2.6 The Rentier as a social and discursive function**

Few works attempt to more comprehensively examine the underlying assumptions and implications of the rentier mentality postulation. It remains a fluid concept frequently cited yet rarely expanded upon beyond anecdotal evidence. As such, its sweeping usage as an analysis of some ambiguous “folk psychology” (Hertog 2010: 283) has become a prevailing property of the term. On the occasion when scholars attempt to use more specific vernacular in referring to the causes and effects of the “rentier mentality”, however, no clear distinction is made between economic incentive, personal motivation and some implied work “ethos” intrinsic to the individual. The systematic privileging of the first eliminates other potential push factors (such as cultural, religious or social) that can lead to economic activity, and commodifies the variables of a fundamentally complex behavioral question on the processes of decision-making. In fact, rent alone should not be a sufficient deterrent against productivity – after all, economic incentive holds an insignificant role in the Schumpeterian model.

Moreover, literature contesting the ubiquitous claim that provisions of basic income necessarily obstruct economic productivity is often ignored. Much of the discursive space is occupied by a general acceptance of views that are critical of welfare systems and attribute low productivity and recession to a reliance on passive income. Yet, alternative scenarios do exist and have been addressed by several works, albeit not limited to the Middle East region. Banerjee et al. (2017), for instance, finds that while cash transfer programs may affect type of work (formal or informal), no

evidence exists to suggest that they systematically discourage work or productivity. Contrarily, studies have linked social assistance programs to positive effects. Cash transfer programs provide households with a financial safety net that can lift credit constraints and encourage capital accumulation in poorer households (Alderman and Yemtsov 2014). Among others, they allow households to invest in productive assets (Gertler, Martinez, and Rubio-Codina 2012) and alleviate risk in, for instance, migration to seek better employment opportunities (Ardington, Case, and Hosegood 2009). Furthermore, social assistance programs have also been found to improve educational performance (e.g. Benhassine et al. 2015). There is, therefore, evidence to suggest that both conditional and unconditional programs can encourage productivity rather than cause laziness. Indeed, perception plays an important role in the discourse on welfare programs – whether they are viewed as a means to correct for market failures, or a reward for laziness<sup>15</sup>.

Of course, the valorization of productivity is by no means unique to academic discourse on GCC economies. For not only the “capitalist instinct for work salvation”, but also social and religious inferences can be argued to have historically stigmatized “fortune” or “effortless” income as morally less than “earned” income (Beblawi 1987). Yet, when it comes to this region, geographic focus appears to significantly guide research topic and methodology. The rentier mentality theory has come to represent the “global South” – a category that holds connotations of developmental setbacks, articulated as rentier states. Herein, Arab society is characterized by an aversion to labor yet appetite for riches – resonating Ibn Khaldoun’s theory of a cyclic conflict between rapacious nomads and urbanites whom are weakened by the luxuries of settled lands. This “conquestal mode of production”, as described by Al-Jabiri (1982) (Attar 2019: 17), involves the acquisition of readily available wealth and its distribution among tribesmen as “booty”. Kinship, acquisition of the land’s communal riches and the distribution thereof by ruling elites define the so-called “Asiatic mode of production” (Derks 2018: 320). The “Bedouin ethos” as Patai (2010) characterized it, or “rentier ethics” in which “laboring for one’s income is considered shameful” (Levins 2012: 388), remains a central theme in many analyses of GCC economies. More recently, such Orientalism is rationalized through a vernacular of economic incentive, productivity, innovative capacity and labor force competitiveness. Thus, as vernacular has modernized/evolved along more contemporary issues, representations of the Arabian Gulf have not.

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<sup>15</sup> (Banerjee et al. 2017) finds that the ubiquity of the belief that poverty is caused by laziness is inversely correlated to cash transfer public spending as %GDP

## Chapter 3. Methodology

### 3.1 The qualitative approach

Chapter 2 aimed to provide a qualitative analysis of the space that RST has come to occupy in the discourse on political economy, economic development and entrepreneurship in the Arabian Gulf. Its perfunctory use in explaining social, economic and political challenges in the region was demonstrated using literary works across studies – ranging from those that address regime security to entrepreneurship and creation of knowledge economy in the region. It was found that the Rentier archetype consequent to RST, has become implicitly or explicitly incorporated into a significant portion of these works. In relation to the original question of whether the creation of a knowledge economy is feasible in this region, the arguments posed by the hegemonic discourse is that GCC society does not have the human capacity to transition towards an economy personified by the “ideal entrepreneur”.

The literary works used for the analysis were identified through a search in multiple digital libraries such as Google Scholar, JSTOR and Web of Science (WoS). This search was in turn performed using unspecific/guiding keywords that would likely be broad enough so as to return works from across research purposes and academic disciplines, yet restrictive enough so as to exclude works that:

1. Do not include the Middle East as a region of study,
2. Have no clear relation to political economy,
3. Have no clear relation to economic development, and
4. Do not address the subjects of entrepreneurship, innovation or knowledge economy.

The works returned in the search were subsequently selected on publication date, covering all works from 1970 (when RST was formulated in Mahdavy 1970) to present. These were then read to determine to what extent the content (a) references (implicitly or explicitly) RST, (b) utilize arguments proposed by RST, (c) incorporates similar representations of Arabian Gulf society to those implied in RST (e.g. the Rentier archetype) or (d) contributes towards the discourse through, for instance, seeking empirical validation or invalidation of RST. This step is not to exclude works that do not draw information from RST (as the only exclusionary criteria applied are the four listed above), but rather as an additional check to mitigate the risk of building a seed that is too specific (e.g. Al-Kaabi, Demirbag, and Tatoglu 2010 – a case study of a particular company in Qatar) or includes less relevant works (e.g. Doukas et al. 2006 – an analysis of renewable energy business opportunities in the region). Neither was an exclusionary criteria applied in this step with regard to the context or purpose of research. In other words, a work that attributes a lack of democracy to sociopolitical indifference caused by a distributive economic system (e.g. Ross 2001) and a work that attributes a weak private sector to motivational challenges brought on by the same system (e.g. Hvidt 2015) are equally considered as long as it exhibits at least one of the four properties listed above. Based on recentness and number of citations, they were then assumed as representative of the state of the fields of political economy and economic development in the Arabian Gulf.

While diligent, this approach has several limitations. Indeed, the number of times a work has been cited makes a useful initial indicator for identifying the most relevant works on a particular subject. However, this does not reflect the extent of a work’s influence on a discourse that extends across disciplines or research purposes. Furthermore, while a “close” reading allows for diligent content analysis, it provides limited insight into the trends in knowledge production on a macro scale. Moreover, the methodology relies significantly on qualitative judgment. While important and most appropriate for content analysis, several major assumptions were made throughout this process:

1. Most of the relevant works can be found through the libraries used
2. Keywords used in the search will return a sufficient number of works representative of the relevant works
3. Works that do not explicitly refer to RST or cite a prior work that explicitly refers to/discusses RST may still derive information from those that do

The first two assumptions arguably represent systematic risks incorporated into most traditional forms of literature study. This is mitigated by using multiple libraries, additionally scanning for potentially missed works in the reference list of works returned from the initial search and ensuring that the libraries used will at least return the most frequently recurring works in said reference list. More important is the third assumption, as the evidence for the argument that RST dominates discursive space on political economy, economic development and entrepreneurship in the Arabian Gulf is, while demonstrable, also less obvious. A more quantitative approach can test to what extent the assumption holds. The coming section will outline a study through which discursive trend is examined.

## 3.2 The quantitative approach

### 3.2.1 Research question

The arguments made throughout the previous chapters can be formulated into a set of research questions:

1. How has RST (and its archetype of the “Rentier”) influenced: (1) research question selection and (2) discursive evolution in political economy, economic development, entrepreneurship and knowledge economy in the Arabian Gulf

### 3.2.2 Hypotheses

The following hypotheses will be made:

1. Research question selection is significantly influenced by RST, in that they will be closely related to or minimal variations of each other
2. The discourse will show significant clustering behavior as research centralizes around a narrow set of information within the network

### 3.2.4 Tools

- VOSviewer
- Python 3.7
- Zotero Translation Server v2
- Harzing’s Publish or Perish

### 3.2.5 Method

A basis set of works (the seed) found to be most relevant in the discourse (based on number of citations and pre-selection done in the previous literature study). These works are subsequently used as seed, with which a network is formed by examining works that cite said works (i.e. nearest neighbor). This search is performed using Publish or Perish – a program that scrapes the Google Scholar library for “citing” and “cited by” information. The data retrieved, which consists of web



links to the relevant works, is exported to a text file. This text file is imported into Python and sent to Zotero Translation Server, which returns the DOI of the works (among other reference data). The set of DOI's is subsequently imported into VOSviewer, where further analysis such as citation network structure and keyword search can be performed.

### *3.2.5.1 Seed selection*

In this study, four corpora of works are examined: those that discuss (1) political economy in the Arabian Gulf, (2) economic development in the Arabian Gulf, (3) entrepreneurship in the GCC states and (4) knowledge economy in the GCC states. In general each work was selected manually through prior (qualitative) literature study, with the guiding criteria explained in section 3.1.

The dependent variables measured in this part of the experiment, and the explanation for what each will indicate, are listed below.

#### *1. Degree distribution*

A network's degree distribution indicates the probability of finding works (nodes) with certain number links (edges) to other nodes. A higher degree distribution may suggest a more concentrated discourse in the field, or that the field (provided that the network is normalized for its size or in relative terms) is more dominated by a smaller handful of works.

#### *2. Clustering*

Clustering is a measure of how closely knit nodes in a network are – i.e. to what extent nodes tend to show a relatively high density of links. It can be an indicator for how closely research questions are related to each other, i.e. how far scholars tend to stray from mainstream topics/discussions in selecting their research questions. A high clustering coefficient might suggest that the works around which the clustering behavior occurs dictates the direction in which the field evolves.

The clustering coefficient may also indicate the innovativeness in a particular field of research – for the more outliers there are in a network, the lower its clustering coefficient should be. Provided that the corpus is sufficiently large and representative of the state of the field, it can reveal the homo/heterogeneity of discourses that exist within a certain field of research and to what extent the network is expanding, or in the contrary, coagulating.

Several limitations must be considered. Firstly, the clustering coefficient incorporates no directionality – i.e. it does not reflect the direction in which the network is growing unless additional information is provided (e.g. year of citation). It is also insensitive to content, and thus, does not provide any information on why the clustering occurs. For instance, if an outlier emerges out of disagreement with the hegemonic set of works in a particular field (i.e. if it is against a common discourse), it is likely to still cite said works and hence contribute to the clustering coefficient. Moreover, the error of self-selection will also be incorporated into the clustering coefficient, as a self-selecting set of works can naturally be expected to cluster together in one way or another. This error can, however, be mitigated by ensuring that the network is sufficiently large.

#### *3. Most common keywords*

The most common keywords found in a corpus of works can be an indicator for how a work is related to its peer. These are the most recurring terms found in the title and abstract of works. If a set of keywords is commonly found across multiple works, the overlap may indicate a shared reliance on certain theoretical frameworks, narratives or assumptions. It may also indicate proximity in research topic.

A bias is to be expected in the results. The corpus was built on a basis set of pre-selected works. The data returned will therefore, to some extent, be self-selecting. This effect can, however, be minimized in the selection process by applying the appropriate degree of breadth/specificity to the search terms (as previously explained). In this case, one may reasonably assume that the composition of the corpus is based on content and relevance to the general topics of political economy, economic development, entrepreneurship and knowledge economy in the Arabian Gulf rather than references to a specific set of keywords. The effect is also minimized when the corpus is sufficiently large, for as the sample grows it becomes increasingly representative of the true network of works (as nodes), particularly for sparsely connected nodes.

Another factor to consider in using common keywords as an indicator is that the magnitude of the overlap (i.e. how many keywords are shared among how many works) must be significant enough in order to ensure that the contexts in which the keywords were cited are relevant to each other. For instance, a mention of the term “entrepreneur” in the account of an entrepreneur who travelled to the Middle East would not be relevant to or indicative of any meaningful discursive overlap with a use of the same term in a study on how to stimulate valorization of public research in the Arabian Gulf. The chance that such a false positive is returned, however, is assumingly compensated by the error of self-selection explained above.

#### *4. Diameter*

As the longest “shortest path” between two nodes, the diameter indicates the size of the network and may be interpreted as a measure of how many intermediary nodes exist through which information flows from one node to another. The smaller the diameter, the more directly connected all works are to each other and possibly the more homogeneous the information expressed throughout the network.

#### *5. Hierarchy*

The network hierarchy measures the accessibility of a work to the rest of the network, and may be used as an indicator for how easily information flows from one work to another. A work at the top of the hierarchy would mean that on average, it has more connections (cites or is cited by) or is more directly connected to other works in the network. Thus, to some extent, the hierarchy is a measure of how influential a certain work has been in the discourse.

### *3.2.5.2 Additional considerations/potential limitations*

#### *1. Implicit referencing*

Implicit referencing was previously mentioned in section 3.1 as one of the assumptions made in conducting a qualitative discourse analysis. While in the former situation a potential source of criticism may be that evidence for this argument is inflated, in the quantitative approach the size of the corpora and connectedness of works within and between them may be underestimated. Any implicit reference to a prior work that explicitly discusses RST will not appear as a direct link in the network while it may appear as a node with a higher degree of separation. This approach therefore provides a more precise rather than accurate overview of how works are connected to each other.

#### *2. Variation in size of corpora*

Some corpora will naturally be larger and comprise a more complete network than others for the reason that they address a more popular research question or have had either more time to evolve.

The topic of regime security in the Arabian Gulf, for instance, has been discussed by scholars for relatively longer than the topic of knowledge economy in the region. Moreover, the latter topic is more of a niche within the field of political economy than topics such as democracy or regime security. The collection of publications on knowledge economy is therefore comparatively smaller and provides a less “mature” network than that of publications on regime security.

The clustering coefficient will be normalized for such variation in size of corpus. Further analyses, however, such as computation of degree of separation may or may not be affected. Uncertainty in this exists, as a larger network may result in higher degrees of separation but also a more complete network (i.e. more edges between nodes).

### *3. Temporal bias*

Works revolving around a specific topic may be published in bursts. If a research topic is particularly trending within a certain bandwidth of time, a significant portion of publications related to it may appear within said bandwidth.

### *4. Time-dependency*

Once published, it takes time for a work to be cited. Therefore, a delay exists for a newly published work to gain edges with other nodes in the network. The recentness of publication must therefore be considered, for its lack of connectedness with the rest of the network will not necessarily mean that the work is an outlier. This may affect the completeness of the network and computation of the clustering coefficient.

### *5. Missing DOI/ISBN*

A significant number of papers (especially those that were published before the previous decade) may not have been assigned a DOI or ISBN. This lack of unique document identifier prevents the work from being placed inside the network, as the resources available are at the moment not sufficient to form accurate links between said documents.

Approximately 50% of total network (consisting of the three corpora) is missing both a DOI and ISBN. This may stem from a limitation of Zotero Translation Server, which is tasked with finding the unique document identifier of works imported into the server. This error is mitigated provided that the corpora are sufficiently large. In the case that a work from the pre-selected basis set has no DOI or ISBN, it is manually inputted into the network.

### *6. Incomplete citation data on Google Scholar*

As the network is grown based on citation data obtained from Google Scholar, there exists the possibility that the citation data is not complete. This risk is, however, not exclusive to Google Scholar and has previously been discussed by Kousha and Thelwall (2007), Bosman et al. (2006) and Harzing and van der Wal (2008) in relation to the humanities, which found the data source as more comprehensive or frequently used relative to other source including Scopus and Web of Science. Based on these findings and the data source’s free accessibility, Google Scholar was selected.

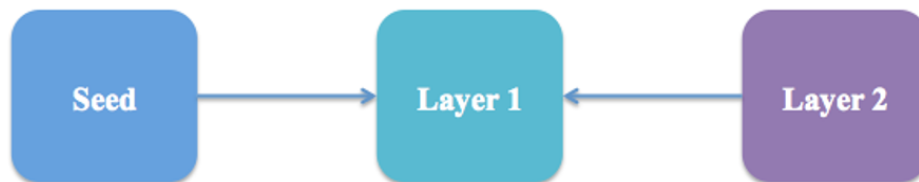
### *7. Argumentative directionality*

No distinction is made between whether a work cites another in agreement or disagreement.

## Chapter 4. Results and discussion

### 4.1 The prototype network

For convenience, the final network will be referred to as the prototype network as this thesis is a preliminary study into citation networks and relationships between studies of the Arabian Gulf. The prototype network consists of three layers and is generated through two “stages” of expansion: (1) an initial list of literary works provides the basis of the network, (2) a first stage of expansion examines which papers cite the initial list of literary works (this stage contains both books and papers) and (3) a second stage subsequently expands the network by examining which papers are also cited by the papers added in the first stage of the network expansion. Figure 1 illustrates the process by which the network is grown. This pathway of growth was chosen to mitigate the effect of straying into less relevant areas of research/corpora of works. It is assumed that the author of a work in layer 1 has made the conscious choice to cite the works that comprise layer 2 by relevance of topic. This relevance, however, is likely to decay more quickly when the second stage of network expansion is done by e.g. analyzing the set of works that cite the works in layer 1.

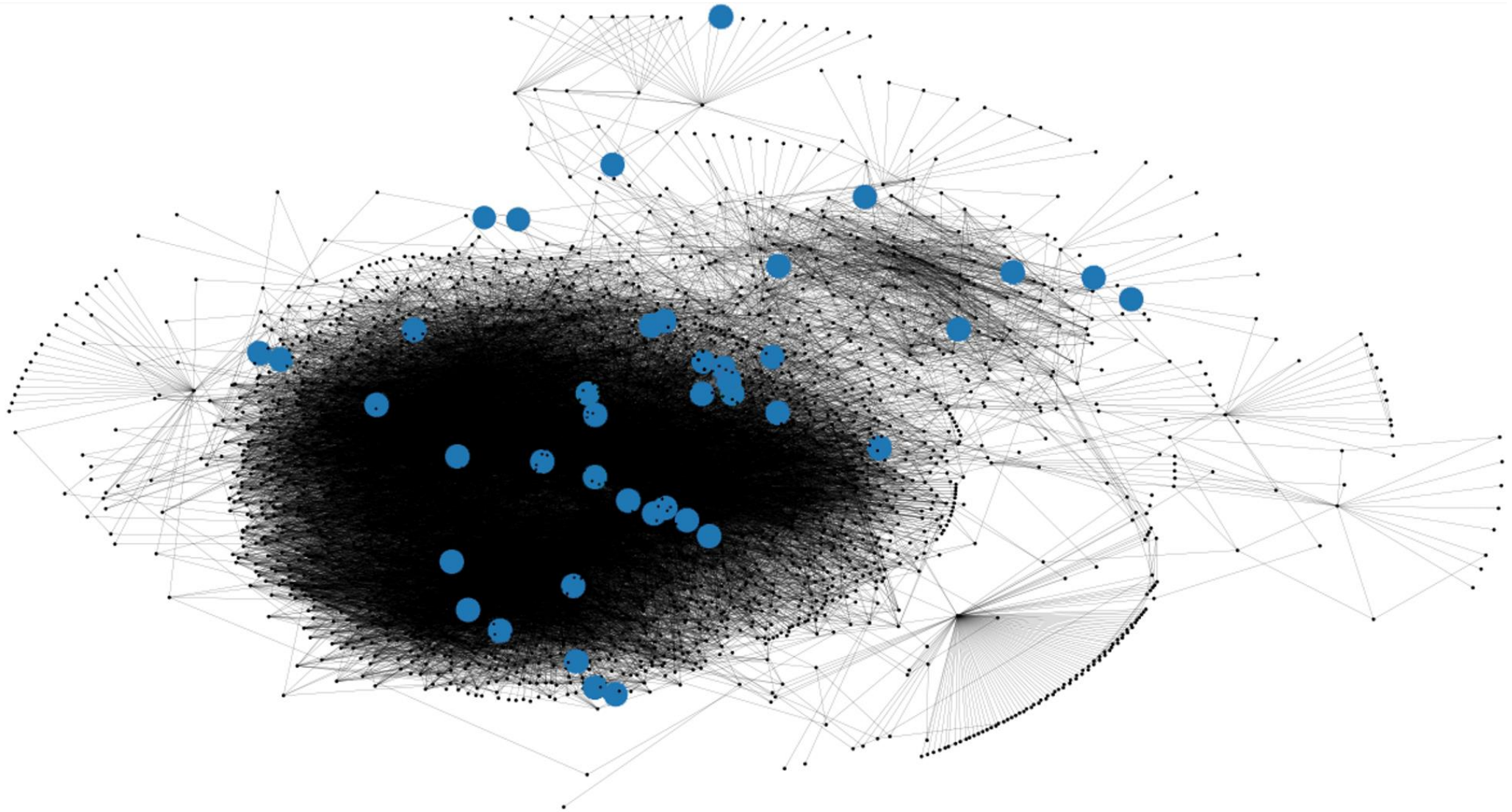


*Figure 1. The resulting prototype network consists of three layers. Inward pointing vectors indicate “citing” data while outward pointing vectors indicated “cited by” data.*

Unfortunately, due to limitations in the available tools, the second stage of expansion can only consider the citations of journal papers and excludes books (there are 2059 books and 5089 journal papers in the second stage (layer) of the network). The total number of works (nodes) included in the prototype network is 42759, resulting in a total of 85761 references (edges).

#### 4.1.2 Connectivity

The prototype network is connected – every node is connected to at least one other node, or every work references at least one other work. This is indeed an intrinsic property of the network due to the finite manner by which it was grown from the initial seed points. It is, however, likely that this connectedness is seen in all citation networks given that it is unlikely for a published work to not cite any other literature. Thus, it is reasonable to assume that in terms of connectivity, this network is representative of networks built on larger citation datasets. Given sufficient resources and barring gaps in the available data in libraries, the manner by which the prototype network is grown will eventually encapsulate all relevant works in the field.



*Figure 2. An overview of the generated network with seed nodes shown in blue, discovered nodes are shown in black. Only nodes with a degree greater than 3 are shown to reduce computation time.*

## 4.2 Network comparison

When performing an analysis of a network based on the previously discussed properties, the networks to which these properties are compared must be of a similar type. For instance, a citation network cannot be expected to have similar properties to a network describing the neuronal distribution in a human body. A comparison of network properties can therefore be performed by examining the network properties of full citation networks contained in some of the larger citation databases, such as those studied in Šubelj, Fiala, and Bajec (2014). When comparing the network properties of the prototype network to the properties of the networks reported by Šubelj, Fiala, and Bajec (2014), it is important to consider the completeness of the networks. Due to the manner by which the prototype network is grown, there is a relatively large number of nodes (mainly located in the second stage of network growth) that will have only a single edge. These single edge nodes exist because their citations have not been analyzed – i.e. because only two rounds of network growth are considered rather than because they contain only one citation. The large number of these nodes with incomplete data can skew the parameters of the network and result in an inaccurate reflection of actual network behaviour. As such, throughout this discussion, network properties with and without these nodes will be reported where relevant.

Two networks are selected from the work by Šubelj, Fiala, and Bajec (2014) for comparison, a network based on the Web of Science (WoS) citation database (an extensive database of scientific literature) and CiteSeer (a citation database based on automated text analysis of scholarly works in the public domain). Both citation networks will contain much more complete data than that contained in the prototype network (due to previously discussed limitations).

<b>Network property</b>	<b>Prototype network</b>	<b>CiteSeer</b>	<b>Web of Science</b>
Average degree	2.00, (6.54)	9.08	9.11
Average clustering coefficient	0.03, (0.1)	0.14	0.18
Degree power-law	~2	2.65	2.74
Diameter	10.0	28.57	8.85

*Table 1. Selected network properties of the generated network compared to the CiteSeer and Web of Science databases. The values in brackets reported in the generated network column are the property values when nodes connected to only one other node are eliminated from the network as they represent an artefact from the way the network is generated.*

### 4.3 Network properties

Other than connectivity, the properties of a network can be characterized by a number metrics, each used to describe how individual nodes in the network interact with one another.

#### 4.3.1 Average degree

One of the simplest metrics is the average degree in a network, or the average number of nodes that each node is connected to. In the case of citation networks, this metric entails the average number of citations linked to a work and includes both the number of citations a work has as well as the numbers of times said work is cited. In networks where directed edges are used<sup>16</sup>, one can calculate the mean incoming and outgoing degree distribution. If the network encapsulates a complete dataset, then these two numbers must be equal. Due to the incompleteness of the prototype network, however, it will be examined from an undirected perspective. Its average degree is 2.00 when all nodes are considered and increases to 6.54 when eliminating nodes with only one edge. In other words, each work cites or is cited by an average of 6-7 other works in the latter scenario. Under both conditions, the average degree is significantly lower than that seen in the more complete networks summarized in Table 1. This is partly anticipated as:

- (1) Access to full citation data for all the works included in the prototype network was limited, and some edges are therefore not represented.
- (2) The scope of the prototype network is limited due to having only two stages of network expansion from the initial seed points. Ideally, expansion continues to infinity or until all works are encapsulated in the network.

Despite the much smaller size of the prototype network compared to those of listed in Table 1, it has a comparable (within the same order of magnitude) average degree. This indicates that the various works in the network are significantly connected with each other, and that in the case that the network was to be infinitely expanded, a higher average degree may be found relative to the larger networks in Table 1. In other words, works that have been produced in the areas of political economy, entrepreneurship and knowledge economy may have a higher tendency to cite each other relative to the average work in large scholarly libraries.

Given that single-edge nodes are an artefact of the manner by which the prototype network is grown and their removal allows for it to be more representative of a complete network, the analyses that follow will be done under with the removal of single-edge nodes.

#### 4.3.2 Degree distribution

The degree distribution  $P(k)$  of a network gives the probability distribution of finding nodes with degree  $k$ . A narrow and well-defined distribution would indicate that each node in the network has equal structural importance. On the other hand, a wide distribution would indicate that there exists a minority set of nodes which hold much more structural importance relative to the size of the network. Real-world networks are usually scale-free networks, which are characterized by a degree distribution given by a power law:  $P(k) \sim k^{-\gamma}$ . Typically  $2 < \gamma < 3$  (Sinha et al. 2010), whereby a large number of nodes have a low degree distribution and a small number of nodes, or “hubs”, have a high degree distribution.

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<sup>16</sup> A distinction is made between an incoming edge (e.g. when a work is cited by another work), and an outgoing edge (e.g. when a work cites another work)

The exponential term ( $\gamma$ ) describing the degree distribution of the prototype network is found to be close to 2. The power law of CiteSeer and WoS citation networks tends closer to 3 – i.e. in comparison, there are fewer hubs, or papers that are relative outliers in their number of citations. As Figure 3 illustrates below, a lower exponential (corresponding to a broader average degree distribution) indicates a higher likelihood of finding a given number of nodes with a higher number of edges. As such, a broader average degree distribution for a network that represents the state of an academic field indicates that there is a minority group of works which are repeatedly referenced and occupy a significant portion of the total discursive space. This suggests that the discourse on political economy, entrepreneurship and knowledge economy in the Arabian Gulf is relatively dominated by few highly cited works. Given that the works included in the network were not selected based on commonality in their citation data, a more complete network may be expected to yield an even lower  $\gamma$ . Unfortunately, given the limited resources and scope of this study it cannot yet be positively identified which specific works the aforementioned hubs are comprised of.

Considering the prototype network to be sufficiently complete, it may be considered scale-free. In this case, the underlying structure of the network, which is described by its degree distribution, clustering coefficient and hierarchy (to be discussed below) is independent of the size of the network. Furthermore, as Cohen and Havlin (2003) shows, scale-free networks are also as ultra-small worlds. These are characterized by their clique-ish property (Sinha et al. 2010), where the neighbors of a node are likely to be neighbors of each other.

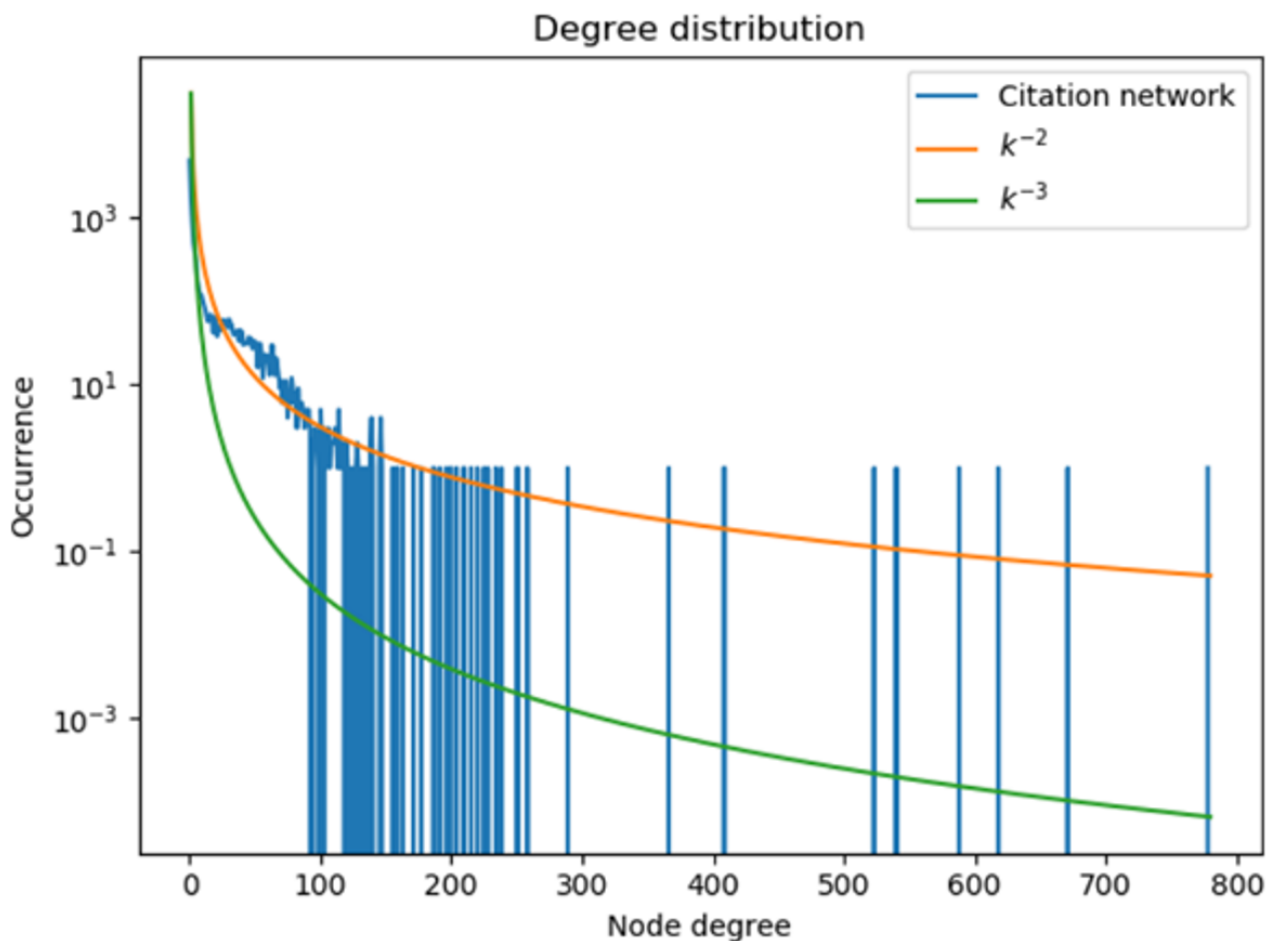


Figure 3. Degree distribution of the nodes in a network with a power-law degree ( $\gamma$ ) of 2 and 3 plotted for comparison. The degree distribution of the prototype network closely matches a power law degree of 2, indicating that the network is dominated by a small set of very highly cited papers.



### 4.3.3 Clustering

The clustering index reveals how well-connected the neighboring nodes of a particular node are. It is a useful measure of how compact a network is. This term is given by:

$$C_i = \frac{2E_i}{k_i(k_i - 1)}$$

where  $E_i$  represents the number of edges between the  $k_i$  neighbors of node  $i$  (Sinha et al. 2010). A clustering coefficient of 1 corresponds to a network where all nodes are connected to all other nodes, whereas a lower clustering coefficient suggests that not all the neighboring nodes of node  $i$  are interlinked with each other. A clustering coefficient of 0 in turn means that none of the neighboring nodes of node  $i$  are linked to each other. Thus, the clustering coefficient is a measure of the clique-ishness of the discourse/works produced.

When considering only nodes with more than one edge, the clustering coefficient of the prototype network is found to be equal to 0.10 compared to 0.14 and 0.18 for the WoS and CiteSeer networks, respectively. While considerably lower than observed in the latter two networks, given the known incompleteness of the prototype network this score is notably high. The clustering coefficient for all the nodes in the prototype network is shown in Figure 4. The graph shows that the vast majority of nodes have a clustering coefficient of almost zero. While this is likely due to the incompleteness of the network, it also shows that some nodes in the network are very highly clustered. This suggests that a few papers are disproportionately influential in the field, in consistence with what was reflected in the power law describing the degree distribution in the network, as previously explained (see Figure 3).

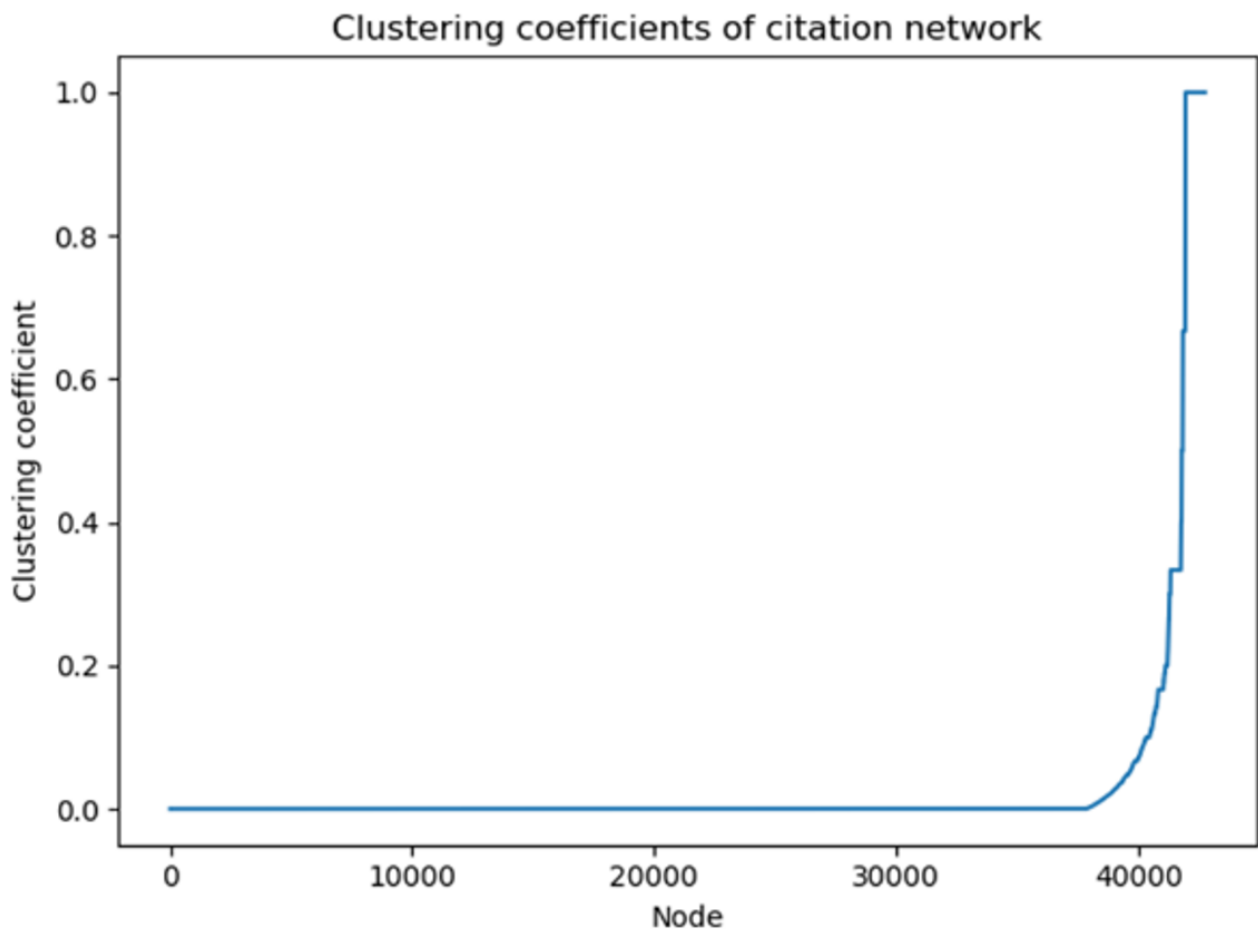


Figure 4. Clustering coefficient of the nodes in the generated network. A large number of nodes have a clustering coefficient of 0 as an artefact of network growth. A few papers are highly clustered.

#### 4.3.4 Most common keywords

##### *Seed and layer 2*

While this metric can give a rough idea of the most popular or frequently cited subjects of discussion among the works in the prototype network, it must be taken with a grain of salt for the limitations that were highlighted in the previous chapter. Of 3674 works in the seed and layer 2 of the prototype, 1292 abstracts were available. This resulted in 17947 unique words, which upon applying a minimum threshold of 20 occurrences resulted in 226 unique words. Subsequently, a VOSviewer algorithm was used to return words with a minimum of 60% relevance, resulting in 136 unique words. Upon manual inspection, several words deemed too generic or irrelevant (such as “paper”, “group”, “evidence” and “period”) were further omitted. This final step resulted in then 97 unique words listed below in Table 2. Figure 5 plots some of the original 136 words, with the frequency of their occurrence represented by the size of the circles, color-coded for the period in which they were most frequently used in works.

##### *Entire network*

Of 42759 works the total prototype network, 15199 abstracts were available. This resulted in 148934 unique words, which upon applying a minimum threshold of 60 occurrences to return below 1000 words. Subsequently, a VOSviewer algorithm was used to return words with a minimum of 60% relevance, resulting in 796 unique words. Upon manual inspection, several words deemed too generic or irrelevant (such as “teacher”, “onset”, “previous study” and “sample”) were further omitted. This final step resulted in the 112 unique words listed below in Table 3. Figure 6 plots some of the original 796 words, with the frequency of their occurrence represented by the size of the circles, color-coded for the period in which they were most frequently used in works.

<b>Word</b>	<b>Occurrence</b>
democracy	820
development	818
conflict	791
region	650
oil	632
regime	600
economy	598
world	580
society	537
resource	524
power	456
value	453
violence	451
politic	433
risk	428
democratization	416
force	389
hypothesis	376
civil war	368
war	358
middle east	335
citizen	332
control	327
africa	325
variable	325
revenue	324
challenge	323
wealth	310
incentive	307
natural resource	303
transition	301
work	299
rent	296
leader	289
elite	288
ability	288
benefit	281
economic development	279
idea	277
effort	268
production	268
behavior	263
rule	261
culture	255
inequality	252
economic growth	241
market	241

income	235
political economy	235
investment	223
opportunity	223
growth	220
protest	218
likelihood	216
history	211
resource curse	205
corruption	204
scholarship	202
election	201
rentier state	189
poverty	185
education	184
peace	184
trade	179
religion	173
autocracy	171
probability	171
knowledge	170
china	168
authoritarian regime	165
islam	163
civil conflict	161
political regime	161
political institution	159
dictatorship	159
violent conflict	157
endogeneity	154
curse	154
regime type	152
causal mechanism	151
emergence	149
business	142
rebellion	142
entrepreneurship	141
insurgency	137
innovation	123
oil wealth	122
cost	122
terrorism	122
woman	119
iran	113
foreign aid	107
united arab emirate	105
prediction	101
ethnicity	99

political science	99
qatar	93

*Table 2. A list of most frequently occurring words in the seed and layer 2 of the network, identified through binary counting – a count of 1 is made if a word occurs in a work regardless of the frequency at which it occurs. For reference, the most frequently occurring word is “democracy”.*

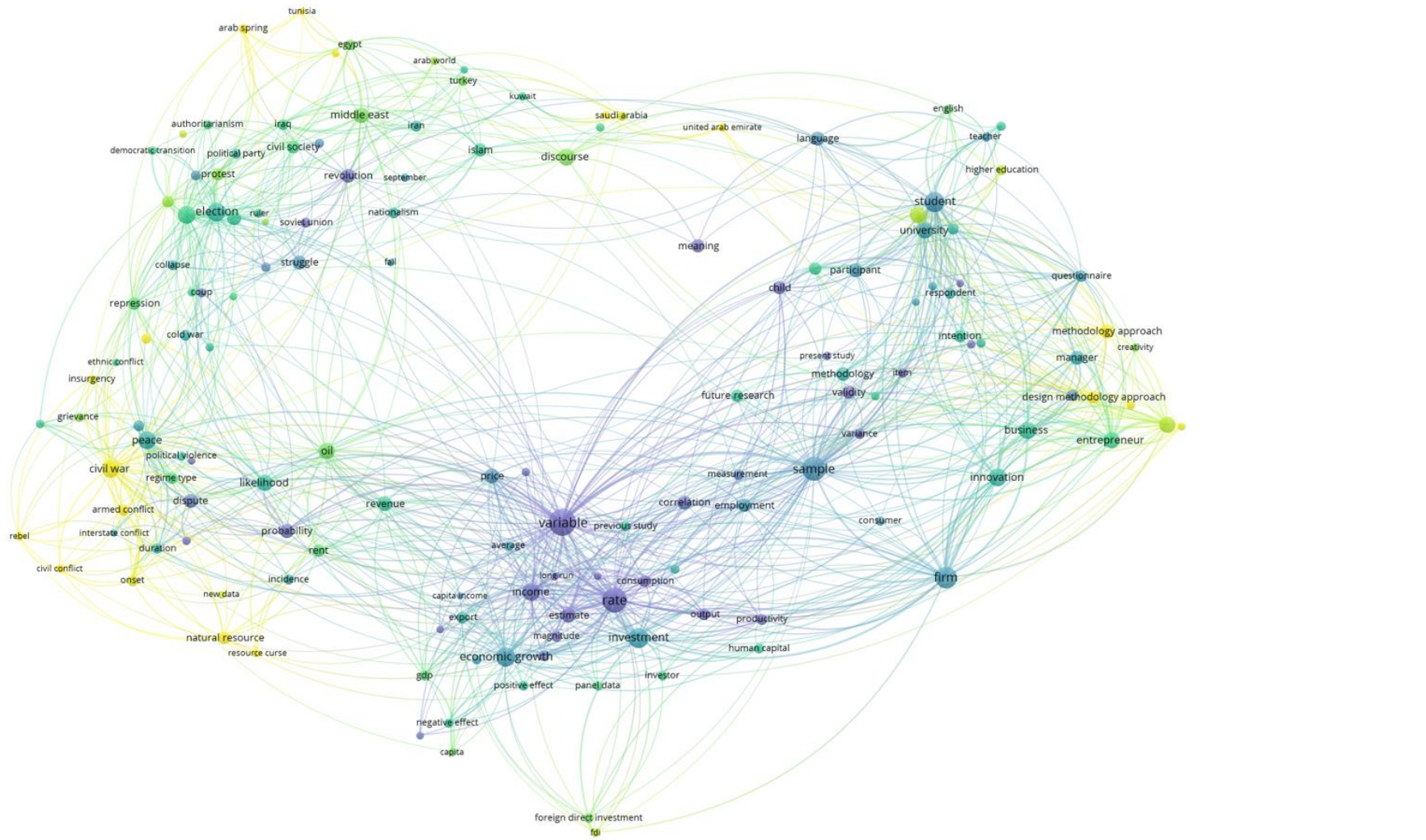


Figure 5. A plot of the most frequently encountered words in the seed and layer 2 of the prototype network after applying VOSviewer's relevance algorithm.

<b>Word</b>	<b>Occurrence</b>
variable	1891
investment	1219
economic growth	1078
civil war	1043
income	1001
oil	926
democratization	872
university	860
middle east	846
entrepreneur	843
election	797
entrepreneurship	776
likelihood	775
peace	774
business	769
price	688
revenue	683
innovation	672
methodology approach	593
probability	587
estimate	585
correlation	584
revolution	565
design methodology approach	537
questionnaire	536
opposition	535
discourse	533
employment	529
manager	524
participant	504
onset	503
intention	499
protest	482
language	477
egypt	474
natural resource	472
gdp	472
dispute	464
repression	462
rent	459
export	457
gender	451
struggle	451
child	447
authoritarian regime	445
iraq	439

methodology	427
consumption	421
islam	412
iran	396
productivity	396
validity	393
regime type	383
foreign direct investment	381
armed conflict	376
civil society	368
saudi arabia	366
human capital	348
capita	330
soviet union	320
turkey	306
settlement	302
autocracy	302
fdi	298
coup	298
civil conflict	297
north africa	294
authoritarianism	294
rebellion	294
arab spring	289
cold war	288
united arab emirate	287
empirical result	283
ruler	278
rebel	277
arab world	274
insurgency	274
higher education	273
kuwait	270
political party	268
household	266
nationalism	265
grievance	260
investor	259
entrepreneurial activity	258
democratic transition	253
collapse	249
qatar	249
political violence	246
unemployment	245
tunisia	241
jordan	239
training	236
democratic institution	231



president	229
inflation	225
resource curse	218
political regime	216
consumer	213
agriculture	206
income inequality	202
capita income	197
personality	191
fall	187
international community	179
creativity	174
democratisation	169
international conflict	165
interstate conflict	161
ethnic conflict	151
afghanistan	147
citizenship	135
international politics	118

*Table 3. A list of most frequently occurring words in the network, identified through binary counting – a count of 1 is made if a word occurs in a work regardless of the frequency at which it occurs. For reference, the most frequently occurring word is “variable”.*



Collectively, the words listed in Table 2 characterize the state of the field. A majority of these words, such as “conflict”, “dictatorship” and “resource curse”, suggest the presence of a dominant theme in which economics in the Arabian Gulf and topics related to autocracy, security and conflict are grouped together. Nonetheless, there are several considerations to be remembered. Firstly, it cannot be said with certainty that current or future discourse on entrepreneurship and knowledge economy in the Arabian Gulf will be as characterized by these keywords as the discourses on economic development and political economy may be. This is because the latter areas of study have been researched for a longer time and yielded more works. This metric therefore favors more mature topics/areas of study over recent ones.

Additionally, one might argue that these results are unsurprising – i.e. if one analyzes a group of works on the topic of innovation, then it is likely that “innovation” will be returned as one of the most frequently encountered words. However, it must firstly be remembered that neither the seed nor layer 2 were intentionally constructed of works returned from a literature search on the above-listed keywords. The results are therefore not problematically self-selecting. Secondly, it is not meaningful to examine the frequency of occurrence of a specific word in the network. Rather, it is more meaningful to examine which other words also occur frequently. It can then be argued that collectively, they describe the frameworks and approaches which occupy the largest discursive space. Based on the results in Table 2 it may therefore be said that until today, the discourse on political economy, economic development, entrepreneurship and knowledge economy in the Arabian Gulf are particularly characterized by questions related to extraction of natural resource, regime security, conflict, culture, religion and other recurring points of address in RST as well as Orientalist perceptions of Middle East/Arabian Gulf societies discussed in previous chapters.

Similar conclusion can be drawn for the entire network based on the data displayed in Table 3. It is perhaps also worth noting that the recurrence of words such as “civil war”, “curse”, “violent conflict”, “protest”, “grievance”, “collapse” and “dictatorship” contribute to an overarching mood of inevitability, stagnation, precariousness and dystopia.

#### **4.3.5 Diameter**

The diameter of the network, the longest ‘shortest path’ connecting two nodes is a measure of how well connected the network is. The diameter reflects the maximum number of steps needed to reach any other node in the network. A relatively small diameter indicated that the network is densely connected. The diameter of the prototype network is 10, comparable to 8.85 for the WoS network and significantly smaller than the 28.57 for the CiteSeer network. This again indicates that the prototype network is relatively tightly clustered since the diameter would be expected to decrease further as nodes become better connected and the network becomes more complete.

#### **4.3.6 Hierarchy**

The low average degree distribution, high clustering coefficient, small diameter and concentrated citation data of the prototype network suggests that the state of the field is significantly centered around a handful of works in comparison to similar citation networks with more complete datasets. In other words, some works are more influential relative to others, possibly to the extent that they define the course of the discussion and, hence, the selection of topics/research questions by scholars whom intend to study the geographic regions of the Middle East and Arabian Gulf. In order to examine the symmetries of information flow in the discourse on political economy, economic, the hierarchy of the prototype network was studied.

The hierarchy of a network describes the network's topology. A previous study of network hierarchy examined the m-reaching centrality of scientific journals to determine which journals were more or less impactful than others (Palla et al. 2015). The m-reaching centrality, as introduced by Mones, Vicsek, and Vicsek (2012), can be used to describe the position of a node in a system-dependent hierarchy. Effectively, this computes the number of nodes that node  $i$  can reach along the shortest path in  $m$  number of steps. This can be used as a measure of how easily information flows from one node to another – or more precisely, which nodes have more access to the rest of the network than others. Using a similar approach, the m-reaching centrality of each node in the prototype network was calculated. Table 4 shows the results in descending order of number of nodes that can be reached in  $m = 2$  steps.

<b>Rank</b>	<b>Title (Author)</b>	<b>DOI/ISBN</b>	<b>Number of nodes</b>
1	The oil curse: how petroleum wealth shapes the development of nations (Ross 2012)	10.1515/9781400841929//9780691159638	14583
2	The political economy of the resource curse (Ross 2011)	10.1017/S0043887100008200	13565
3	Does oil hinder democracy (Ross 2001)	10.1353/wp.2001.0011	11939
4	Oil, nontax revenue and the redistributive foundations of regime stability (Morrison 2009)	10.1017/s0020818309090043	10803
5	Oil wealth and regime survival in the developing world, 1960-1999 (Smith 2004)	10.1111/j.0092-5853.2004.00067.x//10.2307/1519880	9798
6	Greed and grievance in civil war (Collier 1999)	10.1596/1813-9450-2355	8292
7	Greed and grievance in civil war (Collier 2004)	10.1093/oep/gpf064	7613
8	Ethnicity, insurgency and civil war (Fearon 2003)	10.1017/s0003055403000534	7308
9	Determinants of democracy (Barro 1999)	10.1086/250107	7202
10	Democracy and development: Political institutions and well-being in the world 1950-1990 (Przeworski 2000)	10.1017/cbo9780511804946	5646
11	Do natural resources fuel authoritarianism? A reappraisal of the resource curse (Haber 2011)	10.1017/s0003055410000584	5416
12	Some social requisites of democracy: economic development and political legitimacy (Lipset 2012)	10.2307/1951731	5403
13	Resource wealth and political regimes in Africa (Jensen 2004)	10.1177/0010414004266867	5203
14	Studies in the economic history of the Middle East (Cook 1970) (*)	197135617	4854
15	Institutions and the resource curse (Mehlum 2006)	10.1111/j.1468-0297.2006.01045.x	4548
16	Institutions, institutional change and economic performance (North 1990)	10.1017/cbo9780511808678	4443
17	A closer look at oil, diamonds and civil war (Ross 2006)	10.1146/annurev.polisci.9.081304.161338	4140

18	The resource curse revisited and revised: A tale of paradoxes and red herrings (Brunnschweiler 2007)	10.1016/j.jeem.2007.08.004	4124
19	Armed conflict 1946-2001: A new dataset (Gleditsch 2002)	10.1177/0022343302039005007	4052
20	Natural resource wealth and the survival of autocracy (Ulfelder 2007)	10.1177/0010414006287238	4042
21	The logic of political survival (Bueno de Mesquita 2003)	10.7551/mitpress/4292.001.0001	4035
22	The Arab state (Luciani 1990)	9781315685229	3948
23	The colonial origins of comparative development: An empirical investigation (Acemoglu 2001)	10.1257/aer.91.5.1369	3939
24	On economic causes of civil war (Collier 1998)	10.1093/oep/50.4.563	3894
25	What do we know about natural resources and civil war? (Ross 2004)	10.1177/0022343304043773	3773
26	Oil and democracy: more than a cross-country correlation? (Aslaksen 2010)	10.1177/0022343310368348	3755
27	The curse of natural resources (Sachs 2001)	10.1016/s0014-2921(01)00125-8	3747
28	Natural resources, conflict and conflict resolution: uncovering the mechanisms (Humphreys 2005)	10.1177/0022002705277545	3633
29	“Can’t buy me legitimacy”: the elusive stability of Mideast rentier regimes (Abulof 2017)	10.1057/jird.2014.32	3614
30	The varieties of resource experience: natural resource export structures and the political economy of economic growth (Isham 2005)	10.1093/wber/lhi010	3560
31	Democracy and redistribution (Boix 2003)	10.1017/cbo9780511804960	3559
32	What do we know about natural resources and civil war? (Ross 2014)	10.1146/annurev-polisci-052213-040359	3543
33	Natural resources: curse or blessing? (van der Ploeg 2011)	10.1257/jel.49.2.366	3517
34	Refining the oil curse: Country-level evidence from exogenous variations in resource income (Liou 2013)	10.1177/0010414013512607	3465

35	Leader survival, revolutions, and the nature of government finance (Buenoe de Mesquita 2010)	10.1111/j.1540-5907.2010.00463.x	3428
36	Does oil wealth affect democracy in Africa? (Anyanwu 014)	10.1111/1467-8268.12061	3361
37	The illusory leader: natural resources, taxation and accountability (McGuirk 2013)	10.1007/s11127-011-9820-0	3316
38	The British Academy Brian Barry Prize Essay: An exit, voice and loyalty model of politics (Roberts Clark 2017)	10.1017/s0007123416000442	3297
39	Resource curse or rentier peace? The ambiguous effects of oil wealth and oil dependence on violent conflict (Basedau 2019)	10.1177/0022343309340500	3295
40	Oil, Islam, and women (Ross 2008)	10.1017/s0003055408080040	3288
41	Taking time seriously: time-series cross-section analysis with a binary dependent variable (Beck 1998)	10.2307/2991857	3286
42	Primary commodity exports and civil war (Fearon 2005)	10.1177/0022002705277544	3285
43	The big oil change: a closer look at the Haber–Menaldo analysis (Andersen 2013)	10.1177/0010414013488557	3271
44	Taxation, responsiveness and accountability In sub-Saharan Africa (Prichard 2015)	9781316453735	3254
45	More oil, less democracy: evidence from worldwide crude oil discoveries (Tsui 2011)	10.1111/j.1468-0297.2009.02327.x	3254
46	Keeping the public purse: an experiment in windfalls, taxes, and the incentives to restrain government (Paler 2013)	10.1017/s0003055413000415	3247
47	Oil and autocratic regime survival (Wright 2015)	10.1017/s0007123413000252	3227
48	What to do (and not to do) with time-series cross-section data (Beck 1995)	10.2307/2082979	3216
49	Modernization: theories and facts (Przeworski 1997)	10.1353/wp.1997.0004	3182

50	Do natural resources matter for interstate and intrastate armed conflict? (Koubi 2013)	10.1177/0022343313493455	3181
51	Resource dependence, economic performance, and political stability (Dunning 2005)	10.1177/0022002705277521	3160
52	Sensitivity analysis of empirical results on civil war Onset (Hegre 2006)	10.1177/0022002706289303	3156
53	Lessons from strange cases: democracy, development, and the resource curse in the U.S. states (Goldberg 2008)	10.1177/0010414007313123	3151
54	Resource Curse or Not: A Question of Appropriability (Boschini 2007)	10.1111/j.1467-9442.2007.00509.x	3140
55	The Political Resource Curse: An Empirical Re-evaluation (Wiens 2014)	10.1177/1065912914543836	3128
56	Natural resources and violent conflict: resource abundance, dependence, and the onset of civil wars (Brunnschweiler 2009)	10.1093/oep/gpp024	3105
57	Political risk, reputation, and the resource curse (Jensen 2011)	10.1177/0010414011401208	3093
58	Democracy and dictatorship revisited (Cheibub 2010)	10.1007/s11127-009-9491-2	3052
59	Cooperation, cooptation and rebellion under dictatorships (Gandhi 2006)	10.1111/j.1468-0343.2006.00160.x	3046
60	Of rulers, rebels, and revenue: State capacity, civil war onset, and primary commodities (Thies 2010)	10.1177/0022343310361841	3031
61	Blue blood or true blood: Why are levels of intrastate armed conflict so low in Middle Eastern monarchies? (Møller 2017)	10.1177/0738894217714716	3013
62	Fractionalization (Alesina 2003)	10.1023/a:1024471506938	3012
63	Democratic transitions (Epstein 2006)	10.1111/j.1540-5907.2006.00201.x	2978
64	Measuring state capacity: Theoretical and empirical implications for the study of civil conflict (Hendrix 2010)	10.1177/0022343310361838	2967



65	Does oil hinder social spending? Evidence from dictatorships, 1972–2008 (Hong 2017)	10.1007/s12116-017-9237-y	2964
66	Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data (Pinillos 2011)	10.1007/s11187-009-9230-6	2961
67	Buying peace? Oil wealth, corruption and civil war, 1985–99 (Fjelde 2009)	10.1177/0022343308100715	2933
68	The Arab mind (Patai 2014)	9780967201559	2931
69	The political ecology of war: natural resources and armed conflicts (Le Billon 2001)	10.1016/s0962-6298(01)00015-4	2930
70	Oil, democracy, and context: A meta-analysis (Ahmadov 2013)	10.1177/0010414013495358	2929
71	Natural resource abundance and economic growth (Sachs 1995)	10.3386/w5398	2909
72	Political foundations of the resource curse (Robinson 2006)	10.1016/j.jdeveco.2006.01.008	2883
73	Oil, domestic conflict, and opportunities for democratization (Colgan 2014)	10.1177/0022343314545526	2882
74	The perils of unearned foreign income: aid, remittances, and government survival (Ahmed 2012)	10.1017/s0003055411000475	2861
75	Managing resource-related conflict: a framework of lootable resource management and postconflict stabilization (Roy 2016)	10.1177/0022002716669206	2858
76	Tyrants and migrants: authoritarian immigration policy (Shin 2016)	10.1177/0010414015621076	2836
77	Economic shocks and civil conflict: an instrumental variables approach (Miguel 2004)	10.1086/421174	2833
78	How do natural resources influence civil war? Evidence from thirteen cases (Ross 2004)	10.1017/s002081830458102x	2827
79	No representation without taxation? Rents, development, and democracy (Herb 2005)	10.2307/20072891	2825

80	How much war will we see?: Explaining the prevalence of civil war (Elbadawi 2002)	10.1177/0022002702046003001	2825
81	The rentier state (Beblawi 1987)	709941447	2804
82	Why do some resource-abundant countries succeed while others do not? (Torvik 2009)	10.1093/oxrep/grp015	2797
83	Resource wealth as rent leverage: Rethinking the oil–stability nexus (Smith 2015)	10.1177/0738894215609000	2795
84	Mass protests and the resource curse: The politics of demobilization in rentier autocracies (Girod 2016)	10.1177/0738894216651826	2795
85	Revisiting the resource curse: natural disasters, the price of oil, and democracy (Ramsay 2011)	10.1017/s002081831100018x	2789
86	Oil discoveries, shifting power, and civil conflict (Bell 2015)	10.1111/isqu.12150	2775
87	Extreme bounds of democracy (Gassebner 2012)	10.1177/0022002712446132	2771
88	Do natural resources influence who comes to power, and how? (Carreri 2017)	10.1086/688443	2771
89	Oil and revolutionary governments: fuel for international conflict (Colgan 2010)	10.1017/s002081831000024x	2759
90	Do authoritarian institutions constrain? How legislatures affect economic growth and investment (Wright 2008)	10.1111/j.1540-5907.2008.00315.x	2752
91	State-sponsored development, oil and democratization (Gurses 2009)	10.1080/13510340902884622	2733
92	Political underdevelopment: what causes ‘bad governance’ (Moore 2010)	10.1080/14616670110050020	2723
93	The quality of government (Porta 1999)	10.1093/jleo/15.1.222	2720
94	Remittances and democratization (Escribà-Folch 2015)	10.1111/isqu.12180	2703
95	Natural resources and institutional development (Wiens 2013)	10.1177/0951629813493835	2695
96	Oil and political survival (Andersen 2012)	10.1016/j.jdeveco.2012.08.008	2681
97	Democracy, development, and the international	10.1017/s0003055411000402	2679

	system (Boix 2011)		
98	Natural resources, aid, and democratization: a best-case scenario (Morrison 2006)	10.1007/s11127-006-9121-1	2667
99	The resource curse literature as seen through the appropriability lens: a critical survey (Vahabi 2018)	10.1007/s11127-018-0533-5	2658
100	Oil, domestic politics, and international conflict (Colgan 2014)	10.1016/j.erss.2014.03.005	2656

*Table 4. The top 100 works in the hierarchy. The nodes which represent these works can reach the highest number of nodes in the network in 2 steps, thereby, making them either the works that have had the most influence on the discourse, or works that have incorporated information from the highest number of works in the network. The uncertainty is due to the lack of directionality, or distinction between “cited by” and “citing” data - as an example, Abulof (2017) is relatively recent and has few citations (29) but can be found 29<sup>th</sup> in the hierarchy. This is likely because it cites many of the works in the network. (\*) Cook (1970) is a reference to the book containing a chapter that is the original publication of Mahdavy (1970).*

It may be observed that a number of works at the top of the hierarchy do not specifically address the Middle East or Arabian Gulf. One possible reason is that studies of Arabian Gulf economies draw information from other disciplines. For example, works on the effects of extractive resources on the economy in a GCC state may reference other works that address the effects of extractive resources on economies in general (non-region specific). This “leakage”, however, is arguably insufficient to be a reflection of problematic straying into irrelevant discourses considering the following factors:

- (1) The region-specific selection of the network’s seed
- (2) A significant remainder of the listed works study resource-rich Middle Eastern countries as a region of focus or are regularly cited by RST scholars who study Arabian Gulf economies (e.g. Beblawi 1987, Cook 1970 and the various papers by Ross)
- (3) The theoretical and methodological trends and hegemonies identified in the qualitative analysis, the most frequently encountered words in the network and the presence of are consistent with each other – thereby, confirming that network is sufficiently relevant or representative of the discourse under examination. As an example, a significant portion of the works at the top of the hierarchy employs time-series analyses/statistical methods (e.g. the various papers by Ross, Morrison 2009 and Herb 2005) or focus on the effects of rents on democracy and conflict.

Another observation is that influential works on knowledge economy or innovation (such as Powell and Snellman (2004), Chen and Dahlman (2006) and Shane (1993)), management studies and theory of entrepreneurship (such as Hofstede (1983), Casson (2005), Schumpeter and Opie (1934) and Shane (1992)) do not make an appearance in Table 4. One possible cause is that the theories presented in these earlier works have become incorporated into a collective common sense. Consequently, the assumptions that are carried forward through later works are no longer debated and an exploration into the original works is not perceived as relevant enough to the research context that their proposed frameworks have been (implicitly) applied to. Another possible reason is that the corpus of works on the subjects of entrepreneurship and knowledge economy in the Arabian Gulf is indeed significantly smaller than that of political economy and economic development. One might subsequently consider reasons for why it is smaller. Possible reasons include:

- (1) Research on these topics has only recently emerged. Figures 5 and 6 would indeed suggest that this is the case.
- (2) Microeconomic studies are a significantly less popular choice when the region of study is the Middle East/Arabian Gulf. This is a fair observation to make based on the qualitative as well as quantitative data retrieved, which show that the discourse tends more strongly towards statistical methodologies and macroeconomic data.

Relating this back to the discussion in previous chapters, the lack of microeconomic research on the region is perhaps a reflection of the common portrayal of Middle East/Arabian Gulf societies as static subjects of myopic Oriental despots and the lack of agency given to the region’s individuals.

Also interestingly, while laying down the groundwork for studies of economic development in Middle East resource-reliant economies, original works on RST such as Luciani (1990), Beblawi (1987) and Mahdavy (1970) do not appear as highly as others in the hierarchy. One possible explanation may be that as the discourse on political economy and economic development became increasingly reliant on quantitative methodologies, works which address epistemological frameworks receive increasingly less attention.

## 4.4 Conclusion

Several conclusions can be drawn from the analyses above along with suggestions for further studies:

- (1) The composition of most frequently encountered words among works in the discourse reflects that research question selection and formulation of arguments are significantly focused on an implied causality between resource rents and conflict, democracy and regime security
- (2) The network is somewhat incomplete, as reflected in its low average degree – i.e. some edges (citation data) are missing from the network. It is, however, sufficiently representative of a complete network when single-edge nodes are removed.
- (3) While the network is relatively incomplete, its clustering coefficient is close to those of the much larger and highly complete networks reported in literature (Šubelj, Fiala, and Bajec 2014). This indicates that the clustering behaviour is higher than in general citation networks, as clustering is expected to increase if a complete dataset of citation data was available for the generated network.
- (4) As a scale-free network, the clustering coefficient can be expected to increase with as average degree increases. In other words, the structure of the network may be self-perpetuating in that it becomes increasingly clustered as it grows over time, or the heterogeneity of discourses in the field becomes increasingly less as more works are produced over time.
- (5) The consequence of the prototype network being a small world means that it is likely for an effect to occur in which the “rich become richer while the poor become poorer”. In other words, the field consists of “cliques” and as hubs become larger it may be difficult for innovative works to gain significant influence.
- (6) The network is dominated by relatively few papers that are very highly cited (as suggested by its degree distribution). This dominance is much higher than seen in general citation networks. Future study should focus on generating a more complete dataset of citation networks and including the citation data of books. Improvements in the availability of data can be expected in the future as more data is generated by indexing cites such as Google Scholar and the tools offered by publishers such as Clarivate improve and become more accessible.
- (7) An analysis of the hierarchy of the network indicates that information indeed flows much more readily from a minority group of works. It may be interpreted that knowledge production in the field are disproportionately guided and fuelled by these specific works.

Implications of the above results may be summarized as follows:

- (1) The results support the findings from the qualitative discourse analysis, which suggested that discursive space in the areas of political economy, economic development, entrepreneurship and knowledge economy in the Arabian Gulf/resource-rich Middle Eastern countries (as represented by the total network) are dominated by small number of works in the field.
- (2) The manner by which the discourse evolved is clustered around very small sets of existing works in the field
- (3) The structure of the network indicates self-perpetuating behaviour – i.e. the above-stated trend will likely increase as more work is produced. Unless a conscious effort is made to move the discourse away from hubs in the network, the field will remain stagnant and there will be no significant change in the studies of political economy, entrepreneurship and knowledge economy in the Arabian Gulf. In the case that innovative work is produced, it is

unlikely to be considered an important work without being interlinked to a sufficient number of nodes within a cluster. A new hub must be created, which will require a significant number of scholars to not take for granted the assumptions of RST and resource curse in the Middle East/Arabian Gulf and be willing to look for alternative frameworks and methodologies from outside of this network.

- (4) In order for the discourse to break away from the network, works must be produced which are as minimally interlinked as possible from the existing hubs and clusters – i.e. a work must cite as few works from the network.

## Chapter 5. Conclusion

### 5.1 Summary

Throughout this thesis I tried to analyze and deconstruct the prevalent representation of the Arabian Gulf society as the myopic, apathetic and stagnant society. Qualitative and quantitative approaches were used to identify the discursive forces that shape the manner by which knowledge on the region is produced. RST and the character it ascribes to the GCC state, society and individuals were found to proliferate through much of the existing literature on political economy and economic development in the Arabian Gulf. When placed in the discourse on entrepreneurship and knowledge economy (where perceived feasibility of successful economic transition is defined by the ideal Western Entrepreneur), GCC society is presented as a region-level aggregate of the anti-Entrepreneur – the Rentier.

Based on a close reading of the literature, I argued that the political apathy assumed by RST of resource-rich Arabian Gulf societies significantly influences the tendency with which scholars of the region select their research question and formulate their arguments. Important commonalities between works that address political economy, economic development, entrepreneurship and knowledge economy include:

1. The focus on a causality between resource rents and conflict, democracy and regime security
2. A shift towards quantitative data collection and methodologies in attempting to measure the aforementioned causalities
3. A *homo economicus* assumption that political legitimacy has been purchased through wealth distribution
4. References to the “rentier mentality”, poor work ethic or lack of motivation as an obstacle in economic transition or a reason for economic underperformance (especially in growing a private sector)
5. A significant reliance of discourses in economic development, entrepreneurship and knowledge economy on early works in political economy (i.e. RST)
6. An aggregation of the supposed mentality from an individual level onto a national level

Through a citation network analysis it was found that the topology of the discursive space and its expected growth behavior indicate a disproportionate reliance of research question selection on a narrow set of epistemological and methodological frameworks, or discursive homogeneity. The highly clustered network, composition of most frequently encountered words and appearance of works such as Ross (2001), Collier (2004), Morrison (2009), Beblawi (1987) and Luciani (1990) at the top of the network’s hierarchy arguably confirm the findings of the qualitative literature analysis. Namely, that research on GCC (and more generally, resource-rich Middle Eastern) economies have not significantly progressed beyond the postulations and assumptions introduced by RST – regardless of whether the research findings and arguments support or contend them.

A potentially useful study to conduct in the future would be a comparative analysis of knowledge production on Western countries. If one considers the collection of works on entrepreneurship in the Arabian Gulf to be a perturbed system (with the influence of RST as the perturbation), how would it compare to an unperturbed system that is comparatively free of the previously discussed Orientalist/colonial biases? This would, however, require a significantly more diligent experimental design with regard to the criteria based on which works would be selected.

## 5.2 Closing statement

As mentioned in the introduction, the purpose of this thesis was to examine the genealogy of academic works on GCC economies. Herein, I attempted a post-colonial reading of the existing literature through both “close” and “distant” reading. With the continuous enhancements in computational tools and digitization of sources and scholarly works in the humanities, there exists great potential to explore knowledge production, research behavior and interactions between the vast numbers of sources/works on a macro-scale. This is especially the case when the challenge in the humanities in the near future (and other disciplines for that matter) will most likely come from the abundance of information (and how to navigate through it) rather than the scarcity of it.

However, it must be stressed that any generalization derived from such quantitative approaches will remain an estimate, defined by and only accurate within the assumptions and constraints of the model. Thus, “distant” reading or quantitative analysis of complex systems should be developed and conducted *alongside* or in a manner *complementary* to a “close” reading or qualitative discourse analysis. On its own and without regard for its limitations, the approach is merely instrumental and risks becoming yet another fuel for spurious correlations and assumed causalities.

In particular, further studies should not only focus on what digital humanities professor Willard McCarthy describes as “purely technical concerns of implementation” (Liu 2012), refinement of measurable proxies or expanding the accessibility to metadata and mining resources. Rather, critical works challenging its validity, epistemology and agency in reinforcing hegemonies or marginalizing certain narratives must be produced in parallel.



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## Appendix I: Works included in network seed

<b>Title (Author)</b>
"Greed and Grievance in Civil War" (Collier 2004)
"Bedouins into Bourgeois" (Jones 2017)
"Between Trend and Necessity: Top-Down Entrepreneurship Promotion in Oman and Qatar" (Ennis 2018)
"Does Oil Hinder Democracy?" (Ross 2001)
"Economic diversification in GCC countries: past record and future trends" (Hvidt 2013)
"Employment and Career Motivation in the Arab Gulf States: The Rentier Mentality Revisited" (Kropf 2015)
"Kuwait: The Transformation of an Oil State" (Crystal 2016)
"Over-Stating the Arab State: Politics and Society in the Middle East" (Ayubi 1996)
"Political Islam: Religion and Politics in the Arab World" (Ayubi 2003)
"Reading entrepreneurial power in small Gulf states: Qatar and the UAE" (Ennis 2018)
"The Arab Mind" (Patai 2010)
"The Oil Curse: How Petroleum Wealth Shapes the Development of Nations" (Ross 2013)
"The Paradox of Plenty: Oil Booms and Petro-States" (Karl 1997)
"The Patterns and Problems of Economic Development in Rentier States: The Case of Iran" (Mahdavy 1970)
"The Real Issues of the Middle East and the Arab Spring: Addressing Research, Innovation and Entrepreneurship" (Andersson 2012)
"Towards a Functional Framework for Measuring National Innovation Efficacy" (Mahroum 2013)
"Can't Buy Me Legitimacy': The Elusive Stability of Mideast Rentier Regimes" (Abulof 2017)
"A Theory of 'Late Rentierism' in the Arab States of the Gulf" (Gray 2011)
"Allocation vs. Production States: A Theoretical Framework" (Luciani 1990)
"Becoming a Knowledge Economy: The Case of Qatar, UAE, and 17 Benchmark Countries" (Parcerro 2016)
"Building a Knowledge-Based Economy in the Muslim World: The Critical Role of Innovation and Technological Learning" (Ahmed 2012)
"Challenges to Developing Technological Innovation Systems Energy in Abu Dhabi" (Vidican 2010)
"Determinants of Democracy" (Barro 1999)
"Does Oil Still Hinder Democracy?" (Oskarsson 2010)
"Economic Creativity and Innovation Implementation: The Entrepreneurial Drivers of Growth? Evidence from 63 Countries" (Williams 2010)
"GCC States as 'Rentier States' Revisited" (Springborg 2013)
"Imported Expertise in World-Class Knowledge Infrastructures: The Problematic Development of Knowledge Cities in the Gulf Region" (Kosior 2015)
"Knowledge-Based Innovation and Collaboration: A Triple-Helix Approach in Saudi Arabia" (Shin 2012)
"La rente entrave-t-elle vraiment la démocratie ? : Réexamen critique des théories de l'État rentier et de la malédiction des ressources" (Hachemaoui 2012)
"Leapfrogging into the Knowledge Economy: Assessing the Economic Development Strategies of the Arab Gulf States" (Ewers 2010)
"Life after Oil: Economic Alternatives for the Arab Gulf States" (Peterson 2009)
"More Oil, Less Democracy: Evidence from Worldwide Crude Oil Discoveries" (Tsui 2011)
"Natural-Resource Wealth and the Survival of Autocracy" (Ulfelder 2007)

“New Media: In Search of Equilibrium” in “Political Change in the Arab Gulf States: Stuck in Transition” (Janardhan 2011)
“No Representation without Taxation? Rents, Development, and Democracy” (Herb 2005)
“Oil Wealth and Regime Survival in the Developing World, 1960-1999” (Smith 2004)
“Oil, Nontax Revenue, and the Redistributive Foundations of Regime Stability” (Morrison 2009)
“Paradox of Globalization: New Arab Publics? New Social Contract?” (DeVriese 2013)
“Petro-Linguistics: The Emerging Nexus Between Oil, English, and Islam” (Karmani 2005)
“Political Change in the Middle East: An Attempt to Analyze the ‘Arab Spring’”(Beck 2012)
“Relationship between Individualist–collectivist Culture and Entrepreneurial Activity: Evidence from Global Entrepreneurship Monitor Data” (Pinillos 2011)
“Rent Seeking and the Resource Curse” (Deacon 2015)
“Rentier Wealth, Unruly Law, and the Rise of Opposition: The Political Economy of Oil States” (Okruhlik 1999)
“Resilient Royals: How Arab Monarchies Hang On” (Yom 2012)
“Resource Abundance vs. Resource Dependence in Cross-Country Growth Regressions” (Kropf 2010)
“Resource Wealth and Political Regimes in Africa” (Jensen 2004)
“Saudi Arabia’s Economic Development: Entrepreneurship as a Strategy” (Kayed 2011)
“Seeing Like an Autocrat: Liberal Social Engineering in an Illiberal State” (Jones 2015)
“The Culture of Rent, Factionalism, and Corruption: A Political Economy of Rent in the Arab World” (Hafez 2009)
“The Middle East: An End to Oil Dependency” (Sarant 2016)
“The Perpetuation of Regime Security in Gulf Cooperation Council States: A Multi-Lens Approach: Perpetuation of Regime Security in GCC States” (Evren 2017)
“The Political Economy of the Resource Curse” (Ross 1999)
“The Rentier State and the Survival of Arab Absolute Monarchies” (Levins 2012)
“The Rentier State in the Arab World” (Beblawi 1987)
“The Rentier State: Does Rentierism Hinder Democracy?” (Puranen 2007)
“The Sociology of the Gulf Rentier Systems: Societies of Intermediaries” (Hertog 2011)
“The State and the Knowledge Economy in the Gulf: Structural and Motivational Challenges” (Hvidt 2015)
“Who Benefits from Foreign Universities in the Arab Gulf States?” (Wilkins 2011)