SCHOLARLY REVIEW

Impact of French Colonization on the Modern Entrepreneurial Landscape in Algeria, Tunisia, and Morocco

By Ellen Wang

Author Biography

Ellen Wang is a rising senior in Southern California who is passionate about entrepreneurship and French culture. She speaks French fluently and loves traveling to Francophone countries, having conversations with its people, and learning about its past.

Abstract

This paper examines the impact of French colonialism on the modern-day entrepreneurial landscape in Algeria, Tunisia, and Morocco. While abundant research exists on the impacts of French colonization in North Africa, none examines its social, cultural, and economic ties to the current entrepreneurial environment. This paper shall fill the gap in current research by making novel hypotheses after close examination and analysis of colonial-era infrastructure, industries, and government systems, as well as the post-independence policies and the current entrepreneurial landscapes. Lastly, this paper aims to gain insight into ways North Africa can build a robust private sector, increase Small and Medium Sized Enterprises (SMEs), and reduce first and third world economic inequalities in the future. Recommendations to foster entrepreneurship shall be given at the end. The finding is that French colonial legacies negatively shaped current entrepreneurial landscapes in North Africa.

Keywords: entrepreneurship, startups, French colonialism, North Africa, SMEs, economic dependency, Maghreb, Algeria, Morocco, Tunisia

Introduction

"Rags-to-riches businessman" is a modern narrative that motivates countless people to risk their jobs and fortunes for a venture. Yet, entrepreneurship is not only a cultural phenomenon: it has taken on an unprecedented economic significance through job creation, technological innovation, and private sector development. It influences a country's international status and determines citizens' quality of life; consider the benefits that the United States has derived from tech giants like Apple, Google, and Facebook. In third world countries, the plight of economic dependence on raw material exports (such Algeria's hydrocarbon sector) can be alleviated through the development of an innovative, robust private sector. This paper's objective is to connect colonization, a dark and transformative chapter of North African history, with its current entrepreneurial landscape, in order to understand how third world countries can better bridge the gap with first world countries through innovation. This paper is divided into three main parts: History, Modern Entrepreneurial Landscape, and Findings. The former two establish relevant facts and theories through a literature review, while the latter explains my unique hypotheses that French colonialism hindered the entrepreneurial ecosystem by shaping corrupt and inefficient governments, creating export-dependent economies, unevenly developing infrastructure and education, and inhibiting Indigenous entrepreneurial spirit through land expropriation.

Methodology

Historical documents, prior literature, and economic data were used to understand the evolution of North African economies. In addition, qualitative sources such as Indigenous interviews and case studies of successful entrepreneurs were used to humanize the topic, understand cultural nuances, and contextualize individual cases within the broader historical tapestry. Google Scholar, JSTOR, and Semantic Scholar were used to access research that provided background and evidence for my hypotheses.

Pre-Colonial History

Algeria and Tunisia had been ruled by the Ottoman Empire while Morocco was an independent state. The countries traded ivory, gold, slaves, and artisan goods like textiles and ceramics along the Mediterranean, but most of the population lived on subsistence farming and livestock. Artisan guilds trained apprentices, and regulated prices and quality, allowing for some Indigenous entrepreneurship.

Colonial History

Conquest: French colonization of North Africa was motivated by resource exploitation, access to new markets, and civilization of "barbarians". Algeria was violently colonized through lootings, military campaigns, and massacres starting from 1830; during the 70-year conquest, between 500,000 and 1,000,000 Algerians died. Due to political and military weakness, Morocco and Tunisia were signed into French Protectorates with little resistance in 1912 and 1881, respectively.

Government and Citizenship: The French administration seized power and control from local governments (Britannica, n.d.). It directly governed Algeria, which was a part of the French Republic, and created a dual political system in Tunisia and Morocco where the Bey and Sultan remained figureheads. Viewing Indigenous people as "subjects" rather than citizens, the French excluded them from politics and discriminated against them legally through laws like the Crémieux Decree of October 1870, which granted Jews citizenship but excluded Algerian Muslims (Gungdogdu, 2024). Local departmental councils were composed exclusively of French males, and de facto segregation occurred from economic inequalities (Brown, 2018).

Land: The French expropriated 3 million hectares of land from Algeria and 1 million hectares of land from Morocco (Bennoune, 1981; Daoud and Engler, 1981). Although Tunisia was spared this fate, its natural resources were exploited through mines, vegetable farms, and vineyards (Fonju, 2023; Perkins, 2004). Losing land that was "more valuable than gold" embittered people for generations (Bahij, 2012). This quote from a Moroccan interview conducted by Bahij (2012) poignantly demonstrates a widespread sentiment: “In a matter of years they reduced our tribe from being proud, independent shepherds to a poor working-class desperate enough to seek unskilled jobs on estates that we had once owned. It affected my father deeply and stayed with him all his life… It breaks my heart and fills me with rage!” Land expropriation made a lasting psychological impact that persists today, which shall be explained during Findings.

Economy and Employment: French colonialism caused the birth of the North African proletariat (Bennoune 1981; Bahiji, 2012). Due to factors such as land expropriation, dismissal of the local currency, and pauperizing policies, Indigenous people were forced to become unskilled laborers. They were often excluded from higher positions—before independence, 90% of Algeria’s commercial employees were European (Rodriguez, 2018). French monopolies in fishing, animal skins, wax, and wheat drove merchants and fishermen out of business while French goods made from colonial raw materials stifled Indigenous artisanship (Bennoune, 1979). As 90% of the population, Algerian Muslims produced 20% of its income but paid 70% of its direct taxes, which is evidence of the pauperizing laws (Metz, 1994). Tunisians and Moroccons crowded into bidonvilles, or impoverished areas on the outskirts of cities, due to inadequate urban infrastructure (Bahij, 2012).

Infrastructure and Education: Modern infrastructure and education systems were built to benefit Europeans (Merrouche, 2007). From 1881 to 1932, the Algerian railway network expanded from 1373 km to 4724 km (Conrad, 2003), and hospitals like the Institut Pasteur d’Alger saved lives during the malaria epidemic. In Morocco, a railway connected Fez and Tangier to facilitate easier transportation of goods (Compagnie franco-espagnole du chemin de fer de Tanger à Fez, 1914). However, the education system was often segregated and inaccessible for natives. The secular French school brought some utilitarian education to a previously religious Tunisian education system, but access expanded only after years of persistence by the Tunisian elite (Brogan, 1966). In Algeria, illiteracy worsened as Quranic schools were deprived of funding—as a result, 90% of Algerians were illiterate at the time of independence (Merrouche, 2007). In Morocco, only 51 Indigenous students obtained higher education in a 10-year period between 1926 and 1936, showing the severe lack of access (Kolli, 2024).

Postcolonial Economy

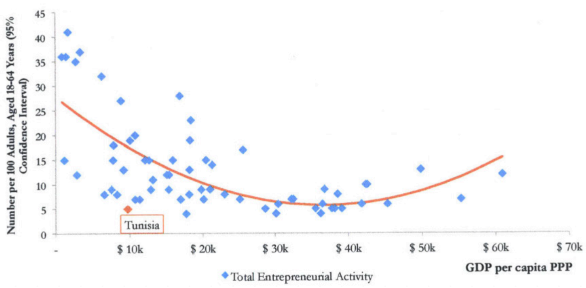
Independence came in 1962 for Algeria and in 1956 for Tunisia and Morocco. Shared attributes of the decolonized states were: dependence on traditional, low-tech sectors such as agriculture, mining, and the export of raw materials; reliance on foreign aid and investment; initial socialism, with gradual shifting towards liberalization due to economic challenges; underdeveloped infrastructure, telecommunications, and education systems; and lastly, a trade deficit resulting from weak domestic manufacturing and private sectors. Applying Dependency Theory, nearly all of these weaknesses originated from the French colonization’s extraction of raw materials without developing well-rounded infrastructure and economies. As export economies are vulnerable to global price fluctuations, the Maghreb states have tried to diversify their economies and strengthen the private sector, but with limited success. Persistent economic issues like unemployment caused social unrest like the Arab Spring. In the present day, Algeria, Tunisia, and Morocco are no longer considered socialist, but state control and reliance on the public sector remain key societal elements.

Modern Entrepreneurial Landscape

This part of the paper is divided into Background and Evaluation. Background establishes relevant economic definitions while Evaluation discusses the current entrepreneurial landscape by examination of government policies, unemployment, education, entrepreneurial networks, and funding.
Background

A distinction must be made between opportunity-based entrepreneurship and necessity-based entrepreneurship (Acs, 2006). In the former, one actively chooses “to start a new enterprise based on the perception that an unexploited or underexploited business opportunity exists”. In the latter, one “becomes an entrepreneur because he or she has no better option”. An example of the former is a software engineer who created groundbreaking AI technology because of his intrinsic passion; an example of the latter is an unemployed farmer who became a street vendor because he had no other job. This is corroborated by Figure 1, which shows a U-shaped relation between entrepreneurship and economic stages:

Figure 1
Total Entrepreneurship Activity (TEA) and Income per capita



Note. Adapted from Xavier et al (2012), as cited in Dziri (2013)

Evidently, entrepreneurial activity is higher for both impoverished and affluent societies. The middle-income section has the lowest entrepreneurial activity because it is where people have stable jobs but not an innovative private sector. Porter's (1990) definition of three economies further explains this:

- Factor-driven economies are based on unskilled labor and agriculture. High unemployment spurs necessity-based entrepreneurship.
- Efficiency-driven economies are industrialized and thus have jobs with higher incomes than self-employment.
- Innovation-driven economies have competitive and efficient industries driven by constant improvement and opportunity-based entrepreneurship.

While opportunity-based entrepreneurship accelerates efficiency in existing firms, creates employment, enhances the quality of life, and disrupts market equilibrium, necessity-based entrepreneurship creates low-quality jobs without economic growth or added value (Fritsch and Mueller, 2004; Wennekers et al, 1999; Wong, 2005). This shall be taken into account during the evaluation of North Africa's entrepreneurial landscape.

Lastly, Small and Medium Sized Enterprises (SMEs) are an important measurement of entrepreneurship. Defined as enterprises with fewer than 250 employees, SMEs play a vital economic role in most economies by constituting 99% of all businesses, employing 50-60% of the workforce, and contributing to 50-60% of the GDP (Keskin et al, 2010). They are essential for economic diversification, driving competition, and increasing productivity (Bayraktar and Algan, 2019). In the 21st century, SMEs have increased participation on the global stage thanks to e-commerce and open trade policies. However, SMEs have difficulty accessing bank loans and credit, have resource limitations, and can be inhibited by economic crises. Many governments have attempted to create SME-friendly policies that support digitalization, R&D, financing, and sustainability.

Evaluation

SMEs, Employment, Public Vs. Private Sectors

In the Maghreb, SMEs account for a majority of enterprises but only employ 20-30% of the labor force, as compared to 50-70% in developed countries (Rym, 2012; Ghanem, 2016). This is because most Maghreb SMEs are informal microenterprises—a 2011 census of 200,000 Algerian SMEs found that 95% were informal enterprises providing low-quality household services, and micro-enterprises (companies that have one to nine employees) make up 90-98% of the SME fabric. Ghanem (2016) describes the Arab microenterprise sector as "a coping and livelihood mechanism for a large portion of the population that is unable to find opportunities in the formal public or private sector". This is precisely necessity-based entrepreneurship. Informal enterprises cannot sustainably develop because they lack access to financing, technology, educated staff, and have low productivity (Delechat and Medina, 2020). In addition, informal microenterprises are generally not competitive outside of the local area due to inability to scale to a national or international audience (Ghanem, 2016).

The high level of unemployment in Maghreb countries (12.3% in Algeria, 17.7% in Tunisia, and 13.7% for Morocco in 2023) explains the high level of necessity-based entrepreneurship; people have no other way of subsistence (Galal, 2024; Statista Research Department, 2024; Trading Economics, n.d.). Yet, the fact that graduate unemployment is even higher (22% in Algeria, 24% in Tunisia, 25.9% in Morocco) reveals two problems: the lack of industry-relevant education and the lack of private-sector employment (Madoui, 2015; High Commission for Planning, 2024; Statista, 2024). The education systems in all three countries have been proven to lack effective entrepreneurial education, soft-skills training, critical thinking, STEM education, and collaborations with industries, resulting in graduates who lack employer-sought skills and the ability navigate shifting market demands (Benouar, 2012; Beggar, 2016; Khalifa, 2024). A shortage of qualified entrepreneurial educators results in outdated pedagogy (Aloulou et al, 2003). In Tunisia, higher education fails to develop the technical literacy needed in a modern market, is catered to the oversaturated public sector, and fails to develop the creativity and innovation valued in the private sector (Khalifa, 2024). In Algeria, education "takes place in a vacuum", meaning that universities do not adapt their curriculum to the real business world (Benouar, 2012). A study interviewing Moroccan university professors found that entrepreneurship modules overly focused on business plan exercises, failing to develop practical soft skills in students (Amina and Zohri, 2019).

In addition, the oversupply of humanities majors exacerbates unemployment. In 2010-2011, 63% of students in Tunisian higher education were enrolled in humanities; yet, employment demand is the highest for financial services and telecommunications (World Bank, n.d.). Likewise, only around 30% of graduates are STEM majors in Morocco and Algeria (World Economic Forum, 2023). Although there currently lacks research on the percentage of successful Maghreb entrepreneurs with humanities degrees, the fact that 90% of BAC+5 graduates (schooling for medicine, engineering, architecture, and pharmacy) were employed after three years of graduation whereas only 60% of humanities and technical education majors were employed shows a weaker market demand for humanities degrees. It is also more common for entrepreneurs to have STEM backgrounds. For instance, the successful Tunisian startup Dabchy—which allows women to exchange clothes online—was founded by biomedical engineer Ameni Mansouri, computer security engineer Ghazi Ketata, and web developer Oussema Mahjoub (Tchounyabe, 2022).

Public sector jobs are coveted among graduates in the Maghreb due to their stability and respectability. Yet, the reality is that the public sector is already overstaffed and has slow employment openings. For example, 600,000 people work within the Tunisian public administration, but only 200,000 are needed for its well functioning—this was an attempt by Former President Ben Ali to curb unemployment (Kallel, 2013). The private sector is weak, and the outdated higher education system further inhibits its development through failure to produce enough qualified human capital. Another reason for the underdevelopment of the private sector may be that North Africans generally regard work as a chore rather than a channel for personal fulfillment or improving society, which thus leads to less proactivity and innovation (Diligent, 2012).

Government and Bureaucracy

The ease of creating and running a business are vital for entrepreneurial activity. Algerian, Tunisian, and Moroccan governments have implemented policies to support innovation; in Algeria, agencies like ANGEM give entrepreneurs financial incentives such as loans and tax benefits; in Tunisia, ANETI provides entrepreneurship coaching; in Morocco, the Industrial Acceleration Plan 2014-2020 supports innovation and job creation in high-value-added sectors like renewable energy and aerospace (Meritas, 2024; Aloulou et al, 2003; El Atmani and Malainine, 2023). However, entrepreneurship is still undermined by ineffective public institutions, high levels of corruption, and the complicated paperwork to incorporate an enterprise; the Maghreb has one of the lowest rates of formal enterprise creation in the world. For instance, the rate is <0.5 for every 1000 people of economically active age in Algeria, as compared to the average of 1.7 for developing countries and 2.6 for the world.

The World Bank's Doing Business report (2019)—which weighs the strength of legal institutions as well as the complexity and cost of the regulatory processes—ranks Morocco, Tunisia, and Algeria at 53, 78, and 257 out of 190 countries, respectively. In Algeria, it takes 20 days to start a business, as compared to 10.5 days in Germany (Beggar, 2016). And even though Morocco has the best ranking among the three, on a global scale it still needs improvement (International Monetary Fund, 2015). Besides the complex regulatory framework, other challenges include customs regulations restricting access to international markets and the lack of intellectual property protections.

Maghreb startups are hindered by government corruption. A survey of Algerian entrepreneurs showed that 46% saw corruption, bribery, crime, and theft as major obstacles, with 81% who experienced such issues personally (Beggar, 2016). Bribery has become a necessity that prevents the government from hindering business logistics rather than bringing added value, and the case is similar in Tunisia and Morocco (Dziri, 2013). A survey of Algerian and Tunisian entrepreneurs listed "constraint of the legal framework" and "weak governance/corruption" as one of 6 major obstacles (Ghanem, 2016). In the monarchy of Morocco, a longtime culture of corruption only worsened after independence, and the lack of accountability and transparency within the public administration persists (Igbida and Essaid, 2024).

Foreign policy between the three countries is also similar in that they intensively garner foreign investment, but fail to effectively foster endogenous innovation (Dziri, 2013). At first glance, it appears that the governments work very hard to foster entrepreneurship—for example, the Tunisian government has 19 initiatives to support SMEs. However, on deeper examination, only one of these initiatives (RITTI) promotes innovation and new technology, while the rest spur necessity-based entrepreneurship within traditional sectors like agriculture. This results in the Maghreb nations' continual status of "follower" in the global economy—it copies foreign technology and enterprises, which "impedes the innovation-based entrepreneurship that results in high rates of net job creation" (Dziri, 2013). Lastly, the Maghreb governments have long regulated the prices of exports such as milk and olive oil following the socialist period (Hertog, 2020). To maximize profits, firms thus decrease costs to the extreme and invest less in marketing and branding, which prevents them from being competitive on a global scale.

The Entrepreneurial Network and Funding

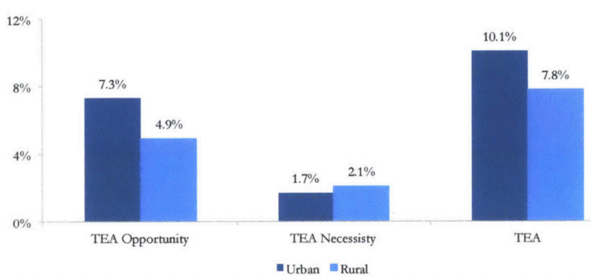
Effective entrepreneurial education is essential to the cultivation of opportunity-based entrepreneurship. This can come from programs such as university courses, international collaborations, or local incubators (El Boury and Qafas, 2021). In recent years, Maghreb governments have recognized the vitality of entrepreneurship and launched innovation-promoting initiatives such as the Emergence Plan in Morocco, Industry Promotion Agency in Tunisia, and Algerian Startup Fund in Algeria. However, success has been limited due to lack of funding, human capital, public-private partnerships, and business mentorship. Mentorship is a significant advantage: a study of successful Moroccan entrepreneurs found that 47.8% had family members who were entrepreneurs (Cheikh and Alaoui, 2018). Yet, unlike countries like the United States, where extensive, free mentorship networks such as SCORE provide entrepreneurs with hundreds of specialties, mentorship opportunities are scarce in the Maghreb due to a lack of "giving back" culture (Nhairy, 2016).

Next, we will examine the successful startup Yassir, essentially the "Uber" of the Middle East and North Africa (Nabeth, n.d.). It was funded 150 million in 2022. Founders Noureddine Tayebi and Mahdi Yettou share one commonality: they were educated and lived extensively abroad. Tayebi attended Stanford for graduate school and has stayed in the Silicon Valley ever since, while Yettou obtained higher education and work in France and Canada. The fact that the most successful Algerian entrepreneurs developed entrepreneurial skills, built their networks, and obtained funding in western countries reveals that the Maghreb's entrepreneurial landscape is relatively weak.

In North Africa, funding remains a central challenge. Although government agencies like ANSEJ and ANGEM provide funding, there are few angel investors and little venture capital, especially in poorer regions (Beggar, 2016). In Tunisia, 43.9 % of SMEs reported finance as a major issue in 2020 (World Bank, 2023). As a result, entrepreneurs lean on family and friends as key sources of funding. A study of opportunity-based Moroccan entrepreneurs shows that 64.6% of successful ones were self-funded, supported by family banks, or depended on personal networks (Cheikh and Alaoui, 2018). Even then, 38% listed access to financing as an issue. This creates disadvantages for entrepreneurs without relevant connections or an affluent family.

Lastly, regional disparities pose a challenge to entrepreneurial inclusiveness and equity. As shown in Figure 2, opportunity-based Tunisian Entrepreneurial Activity (TEA) is higher in urban areas while necessity-based TEA is higher in rural areas. Startups and incubators are also concentrated in urban, prosperous regions that, traced back to colonial times, were dense with European settlers (Cheikh and Alaoui, 2018; Tunisia Executive Report, 2009). On the other hand, present-day impoverished regions had been dense with Indigenous populations.

Figure 2
Urban Vs. Rural Entrepreneurship in Tunisia in 2009



Note. Adapted from GEM (2009), as cited in Dziri (2013).

Industry and Technology

Internet penetration is 71% in Algeria, 88% in Tunisia, and 79% in Morocco as of 2021 (World Bank, n.d.). Although this is relatively high, access to more advanced technology is still limited. Companies are currently challenged to effectively incorporate AI and newer digital technologies into their system (Beggar, 2016). In Algeria, infrastructure still challenges startups, posing issues like a lack of large data centers and cloud computing infrastructure as well as unreliable electricity supply outside of urban centers. Due to a cultural mistrust of online banking and finance and a lack of online payment systems, the e-commerce market is limited.

Findings

After thorough examination of history and economics, I present my original hypotheses on the ways French colonialism shaped Algeria, Tunisia, and Morocco's current entrepreneurial landscapes and support them with evidence:

Government: The French colonial administration led to inefficient, corrupt bureaucracies in modern day Algeria, Tunisia, and Morocco, thus hindering the launch of formal enterprises and business functioning. As Diziri (2013) had stated, "the Tunisian administration doesn't handle citizens' rights; rather it gives 'privileges'...it tries to refocus and redirect entrepreneurs, giving the impression of some 'responsible adults trying to supervise and control minors'". This attitude, shared by Algeria and Moroccan governments, can be traced to the French colonial government's view of colonized populations as "subjects" rather than "citizens". "Subject" denotes an inferior person undeserving of autonomy or rights. This racist mindset influenced the structure and function of the colonial government; it materialized in discriminatory laws and exclusion of Indigenous people from politics. This government was then inherited by post-independence Algeria, Tunisia, and Morocco. Just as the current American government has a legacy of democracy and civil engagement from Lincoln's famous "by the people, for the people" 161 years ago, North African governments have a colonial legacy of suppression, corruption, and control of its people rather than service to and protection of them.

The colony's exclusion of Indigenous people from politics further caused North Africa to suffer from the "brain drain" post-independence; emigration of European settlers brought away nearly all the political and commercial expertise, and Indigenous people had no ruling experience due to exclusion from education and government. As a result, the new administration was understaffed and lacked experience, needing decades to "catch up" with the rest of the world in terms of policy and structure. The disadvantage persists today through the outdated, unproductive government administration.

Culture: The French expropriation of land caused a lasting cultural risk-averseness that hinders innovative entrepreneurship in the

Maghreb. Entrepreneurship is not only an economic phenomenon, but a social and cultural one that requires risk-taking and optimism (Kozubikova et al, 2015; Riasudeen et al, 2022). Therefore, the psychological trauma that French colonization induced in Maghreb populations can be linked to a modern risk-averseness, craving for security, and view of work as a mere method for subsistence rather than a channel for intrinsic fulfillment—all of which hinder opportunity-based entrepreneurship.

As land held significant cultural and emotional value, its expropriation caused humiliation, rage, powerlessness, and bitterness. In pre-colonial times, it had been a treasure that passed between generations, allowing people to be economically independent. Consider the following excerpt from a Moroccan interview: “I was born in the city, I grew up here, but I always know that I have land to go back to, my own land on which I can grow and build whatever I want. That is peace of mind that no amount of money can buy” (Bahij, 2012). The comfort of having land as a backup plan enables people to take risks, seize opportunities, and exploit untapped business opportunities, increasing entrepreneurship. Consider then that the contrapositive is also true: deprivation of land hindered risk-taking and the entrepreneurial spirit.

This postulation is corroborated by quantitative data. In the current day, North African countries have low innovation rates, meaning that entrepreneurs opt for traditional business models with less risk of failure. The rate is 11.48% for Algeria and 14.88% for Morocco, which is lower than the world average of 26.26%; meanwhile, it is 32.17% for Tunisia, nearly 20% higher than its counterparts (Benguergoura, 2020). This statistic’s uncanny alignment with the fact that land had been expropriated from Algeria and Morocco but not Tunisia evidences the lasting cultural effects of this colonial injustice.

Lastly, the view of work as a chore rather than a channel for fulfillment and betterment of society can be linked to the socio-economic status of Indigenous people during colonialism. Merchants and artisans, who had likely been passionate about and proud of their craft, lost their business to French companies. Reduced to unskilled, low-waged labor, natives inevitably came to view work begrudgingly, as a necessary but despised way to self-subsist. Excluded from fulfilling jobs in government and business that had potential to improve society, the taste of fulfilling work was erased in North African memory and is still not widely remembered today. Such an attitude is detrimental to opportunity-based entrepreneurship, as innovative work requires passion, self-confidence, perseverance, and a firm vision for improving society.

Economy: The French failure to develop a balanced industrial sector and infrastructure left the post-colonial states with a weak private sector and export-dependent economies, which brought about lasting socialist policies that undermined entrepreneurship through overregulation. The countries also inherited an unevenly developed transportation system and public infrastructure, causing regional economic disparities that persist today and can still be seen in through the concentration of incubators, business programs, and startups in coastal areas. Export economies deprived the private sector of technology and innovation, constricting the North African countries to factor-driven economies and necessity-based entrepreneurship.

Education: The high illiteracy of indigenous people and lack of educators, businessmen, and other professionals after the “brain drain” post-independence created a lack of entrepreneurial education and a weak system without adequate mentorship and support. Ineffective pedagogy is still used in the universities today, a lasting legacy of the “brain drain”.

Conclusion

This paper has examined the complex colonial past of Algeria, Tunisia, and Morocco to understand the state of their current entrepreneurial landscapes. My findings suggest that French colonialism undermined the entrepreneurial ecosystem of the Maghreb by causing an underdeveloped private sector, export-dependent economies, overreliance on foreign investment, imbalanced industrial infrastructure, a weak education system, a corrupt and inefficient administration, and socialist policies post-independence. However, this study is limited to identifying correlations rather than proving causal relationships, due to the complexity and longitude of factors involved.

I would like to present several recommendations to the Maghreb region for the strengthening of their entrepreneurial ecosystems. I believe that these recommendations can be generally useful to third world countries as well:

1. Develop entrepreneurial incubators, pitch competitions, and startup community groups. This provides a practical, effective, and engaging way for young people to get involved in the entrepreneurial community and network with like-minded peers and successful entrepreneurs. This is better than highly theoretical business courses.

2. Encourage the expansion of foreign entrepreneurial networks into the region. International organizations such as TIE Global and Entrepreneurs Organization can bring valuable networks, mentorship, and inspiration to locals.

3. Strengthen the infrastructure in underdeveloped regions, the E-commerce user base, and Internet penetration to increase entrepreneurs' market access.

4. Examine and adopt pedagogy from the U.S.'s university entrepreneurship programs. American universities have long taught entrepreneurship and business with measurable, world-renowned success that can be learned from.

5. Foster collaboration and communication between universities and the private sector through internships and adaption of the curriculum to match employer-valued skills.

6. Streamline the administrative process. Increase the public sector's efficiency by implementing accountability measures for public employees and reducing corruption. Shorten and simplify enterprise registration paperwork.

7. Loosen government restrictions on labor and trade to give startups flexibility and competitiveness on a global scale.

8. Increase financial support for startups with high-value added potential through tax incentives, loans, and easier access to funding. The private sector development and increase in employment shall far outpay the cost of such incentives.

While the past cannot be changed and the future cannot be predicted, the recognition of entrepreneurship as a vital social and economic phenomenon by Maghreb governments is a promising start to fostering innovation, increasing opportunity-based entrepreneurship, and strengthening its private sectors. Despite the disadvantages of its colonial past, third world countries like Algeria, Tunisia, and Morocco have significant potential for economic prosperity if they doggedly implement and enforce pro-innovation and pro-startup policies while shifting the culture regarding work and risk-taking. This will aid in the creation of a more prosperous, innovative, and peaceful future society.

References

Acs, Z. (2006). How is entrepreneurship good for economic growth?. Innovations: Technology, Governance, Globalization, 1(1), 97-107.

Aloulou, W. (2003). ENTREPRENEURSHIP EDUCATION AND TRAINING IN TUNISIA: AN EARLY OVERVIEW. Internationalizing Entrepreneurship Education and Training.

Amina, A., & Zohri, A. (2019). Entrepreneurial Culture and the Education System: The Case of Moroccan Universities. 7th International OFEL Conference on Governance, Management and Entrepreneurship.

Amraoui, B. (2019). PERFORMANCE OF CLUSTERS IN MOROCCO IN THE SHIFTING ECONOMIC AND INDUSTRIAL REFORMS. Insights Into Regional Development, 1(3).

Bahij, A. A. (2012). The socio-economic legacy of French colonialism in Morocco: The lasting impact of the French protectorate on Morrocan trade, agriculture and education [Doctoral thesis, University of Bradford]. https://bradscholars.brad.ac.uk/bitstream/handle/10454/5772/A.A.%20BAHIJ.pdf?sequence=3&isAllowed=y

Bayraktar, M. (2019). The Importance of SMEs on World Economies [Paper presentation]. INTERNATIONAL CONFERENCE ON EURASIAN ECONOMIES 2019.

Beggar, R. (2016). IT Entrepreneurship Ecosystem in Algeria.

Benguergoura, S. (2020). Regional Baseline Assessment Region I: Algeria, Morocco and Tunisia. SCP/RAC.

Bennoune, M. Primary capital accumulation in colonial Tunisia. Dialect Anthropol 4, 83–100 (1979). https://doi.org/10.1007/BF00264988

Bennoune, M. (1981). Origins of the Algerian Proletariat. https://merip.org/1981/01/origins-of-the-algerian-proletariat/#:~:text=The%20colonial%20agents%20and%20their%20surveyors%20%E2%80%9Carmed%20with%20extraordinary%20powers%2C%E2%80%9D%20%5B27%5D%20followed%20in%20the%20tracks%20of%20the%20colonial%20army.%20Using%20innumerable%20arbitrary%20measures%20%E2%80%94%20sequestration%2C%20confiscation%2C%20expropriation%2C%20cantonment%2C%20and%20the%20application%20of%20various%20property%20bills%20devised%20to%20establish%2-0%E2%80%9Cincommutable%20individual%20property%E2%80%9D%20%28thus%20transforming%20the%20soil%20into%20a%20commodity%29%20%E2%80%94%20an%20increasing%20number%20of%20hectares%20were%20accumulated%20for%20the%20purposes%20of%20colonization.%20The%20ceaseless%20transfer%20of%20land%20from%20the,and%20-pastureland

Benouar, D. (2012). Algerian experience in education, research and practice. 6th International Forum on Engineering Education.

Brown, H. (2018). French Colonialism in Algeria: War, Legacy, and Memory [Master's thesis, Bucknell University]. https://digitalcommons.bucknell.edu/cgi/viewcontent.cgi?article=1452&context=honors_theses

Buchholz, K. (2023, March 20). Which countries' students are getting most involved in STEM? World Economic Forum.

Compagnie franco-espagnole du chemin de fer de Tanger à Fez. (1914).

Conrad P. (2003), "Le Maghreb sous Domination Francaise (1830-1962)", edition Clio

D. W. Brogan, The Development of Modern France 1870–1939 (London: Hamish Hamilton 1940), pp. 146–160.

Daoud, Z., & Engler, I. (1981). Agrarian Capitalism and the Moroccan Crisis. MERIP Reports, 99, 27–33. https://doi.org/10.2307/3011318

Diligent, L. (2012, February 4). Understanding North African Work Behavior: A Comparative Analysis. Intercultural Meanderings. https://interculturalmeanderings.wordpress.com/2012/02/04/understanding-north-african-work-behavior-a-comparative-analysis/

Dupire, C. (2023, July 27). Algerian entrepreneurs revolutionise sustainability industry. https://south.euneighbours.eu/story/algerian-entrepreneurs-revolutionise-sustainability-industry-insect-farming-and-waste-recycling-innovations-gain-eu-support/#:~:text=July%2027%2C%202023,farming%20for%20sustainable%20animal%20feed

Dysfunctions of the Labor Market. (n.d.). World Bank.
Dziri, M. H. (2013). Assessing the Entrepreneurial Ecosystem in Tunisia [Master's thesis, Massachusetts Institute of Technology]. file:///Users/ellenwang/Downloads/857792736-MIT.pdf

Economy of Morocco. (n.d.). In Encyclopaedia Britannica.

El Atmani, S., & Malainine, C. (2023). Contribution of Entrepreneurial Innovation to the Moroccan Economy. European Journal of Theoretical and Applied Sciences.

Employment in Tunisia - statistics & facts. (2024, June 27). Statista. Retrieved July 29, 2024, from https://www.statista.com/topics/8902/employment-in-tunisia/#topicOverview

Establishment and Promotion of Startups in Algeria. (2024, April 25). Meritas. Retrieved July 31, 2024, from https://www.meritas.org/insight/article/Establishment-and-Promotion-of-Startups-in-Algeria#:~:text=The%20ASF%20will%20enable%20entrepreneurs,the%20country%27s%2058%20regional%20provinces

Fonju, N. K. (2023). The Anachronism of International Pre-Colonial Loan Burdens and Intensive occupation of Tunisian Territory as a Colonial Yoke of France under 23 Appointed Diplomatic Agents of Exploration, Expropriation and Exploitation (3Es) 1863-1956. Cross-Currents: An International Peer-Reviewed Journal on Humanities & Social Sciences. :10.36344/ccijhss.2023.v09i06.001

GEM, 2009 Tunisia Executive Report.

Ghanem, H. (2016). Entrepreneurship for Inclusion. In The Arab Spring Five Years Later.

Gundogdu, B. (2024). Citizenship of Algerians During the French Colonial Period Between 1865 to 1919. Journal of Social and Cultural Research, 10(20). https://doi.org/10.25306/skad.1440060

Hertog, S. (2020). Segmented market economies in the Arab world: the political economy of insider-outsider divisions. The London School of Economics and Political Science.

Ibn Cheikh, B., & Latifa Alaoui, L. L. A. (2018). The Profile of the Moroccan Entrepreneur: The New Generation of Entrepreneurs in Morocco. European Scientific Journal, 14(19).

Igbida, I., & Essaid, T. (2024). CORRUPTION IN MOROCCO-A SECTORIAL ANALYSIS. INVEST: Journal of Sharia and Economic Law, 4(1).

Jacquet, P. (March 2004). Politique de change, comp6titiviti et convertibiit6 du dinar. Le Manager, le mensuel de l'entreprise: 92.

Kallel, M. (Interview, January 26, 2013)

Kassab and Ounaïes, L'Époque Contemporaine 1881–1956 (Tunis: Sud Éditions 2010) at 175-178, 182

Keskin, H. (2010, July 8). The Importance of SMEs in Developing Economies [Symposium contribution]. 2nd International Symposium on Sustainable Development, Sarajevo.

Khalifa, T. B. (2024). A Critical Perspective to Higher Education in the 21st Century Tunisia: The Problems of the Present and the Challenges of the Future. Trends in Education and Educational Studies, 1(2).

Kolli, V. (2024, July 10). Linguistic Colonialism: Moroccan Education and its Dark Past. Harvard International Review. Retrieved July 29, 2024, from https://hir.harvard.edu/linguistic-colonialism-moroccan-education-and-its-dark-past/#:~:text=Under%20the%20protectorate%2C%20the%20French,linguistic%20barriers%20to%20hi-gher%20education.

Kozubíková, L. (2015). PERSONAL CHARACTERISTICS OF ENTREPRENEURS IN THE CONTEXT OF PERCEPTION AND MANAGEMENT OF BUSINESS RISK IN THE SME SEGMENT. Economics and Sociology.

Madoui, M. (2015). Unemployment among Young Graduates in Algeria: A Sociological Reading. Open Journal of Social Sciences, 3(11).

Merrouche, O. (2007). The Long Term Impact of French Settlement on Education in Algeria.

Metz, H. C. (1994). Algeria: a country study. Washington, D.C.: Federal Research Division, Library of Congress.

Morocco Unemployment Rate. (n.d.). Trading Econoics. Retrieved July 29, 2024, from https://tradingeconomics.com/morocco/unemployment-rate

Nabeth, S. (n.d.). SUCCESS STORY : Noureddine Tayebi and Mahdi Yettou, founders of Yassir. Abramundi. Retrieved July 29, 2024, from https://www.abramundi.org/post/success-story-noureddine-tayebi-and-mahdi-yettou-founders-of-yassir

Nhairy, S. (2016, February 14). The Changing Face of Entrepreneurship in Morocco. Entrepreneur.com. Retrieved July 31, 2024, from https://www.entrepreneur.com/en-ae/entrepreneurs/the-changing-face-of-entrepreneurship-in-morocco/270651

Perkins, History of Modern Tunisia (Cambridge University 2004), p. 49 (colon lands).

Resources and power. (n.d.). In Encyclopaedia Britannica.

Riasudeen, S. (2022). Risk Perception as a Mediator in Explaining the Relationship of Cognitive Biases and New Venture Creation. The Journal of Entrepreneurship.

Rodriguez, S. S. (2018). Colonization to Globalization: French-Algerian Integration Analysis from Historical, Societal, and Economic Perspectives [Master's thesis, University of Dayton]. https://ecommons.udayton.edu/cgi/viewcontent.cgi?article=1184&context=uhp_theses

Rym. (2012). Small and Medium Sized Enterprises (SMEs) in the Southern Mediterranean [Paper presentation]. Committee on International Trade.

Sawahei, W. (2024, April 5). Quarter of Moroccan graduates unemployed, report shows. University World News, Africa Edition. Retrieved July 31, 2024, from https://www.universityworldnews.com/post.php?story=20240405052300822#:~:text=A%20quarter%20of%20university%20graduates,Commission%20for%20Planning%2C%20during%20March.

Statista Research Department. (2024, June 8). Employment in Algeria - statistics & facts. Statista. Retrieved July 29, 2024, from https://www.statista.com/topics/7361/employment-in-algeria/#:~:text=While%20the%20overall%20unemployment%20rate,a%20key%20challenge%20for%20Algeria.

Statista Research Department. (2024, June 27). Unemployment rate in Tunisia from 2016 to 2021, by educational level. Retrieved July 31, 2024, from https://www.statista.com/statistics/1186347/unemployment-rate-in-tunisia-by-educational-level/#:~:text=In%202021%2C%20the%20unemployment%20rate,11%20and%2012%20percent%2C%20respectively.

Tchounyabe, R. (2022, February 7). Dabchy, the first women's fashion marketplace in Tunisia. wearetech.africa.

Transportation and telecommunications. (n.d.). In Encyclopaedia Britannica.

Tunisia Selected Issues. (2015, September 16). International Monetary Fund.

Tunisia: World Bank Approves $120 Million to Support Access to Finance for Small and Medium Enterprises. (2023, February 8). World Bank. Retrieved July 31, 2024, from https://www.worldbank.org/en/news/press-release/2023/02/08/tunisia-world-bank-approves-120-million-to-support-access-to-finance-for-small-and-medium-enterprises#:~:text=Tunisian%20SMEs'%20access%20to%20finance,percent%20of%20firms%20in%202020.

World Bank Group Data, Algeria. (n.d.).

World Bank Group Data, Morocco. (n.d.).

World Bank Group Data, Tunisia. (n.d.).

World Economic Forum. (2012). The Global Competitiveness Report 2012-20013: 8-9. Retrieved from http://xvww3.weforum.org/docs/WEF GloblCompetitivenessReport 2012-13.pdf

Xavier, S.R., Kelley, D.J., Kew, J., Herrington, M., & Vorderwulbecke, A. Global Entrepreneurship Monitor (GEM) 2012 Global Report