

CASE STUDY

Public-private partnerships and achievement of public value: The experience of Jordan's Queen Alia International Airport

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ABSTRACT

Despite the existence of a voluminous body of literature covering the impact of infrastructure public-private partnerships (PPPs) on public value within the context of Western countries, scant attention has been paid to this topic in the Middle East. Given that the region has hosted numerous PPP projects that were implemented even without the rudimentary legal and regulatory frameworks considered essential for such projects to succeed, a study of PPPs within that region would thus be particularly useful, since an unpacking of the success factors for PPPs in the Middle East can reveal important practical insights that will advance the knowledge of PPP success factors overall. This paper, therefore, explores the rehabilitation and expansion of Jordan's Queen Alia International Airport via the PPP route. It finds that the factors contributing to the project's successful implementation can be categorized into those on the macro level related to political support, and the micro level factors concerned with management of daily activities involved in the partnership between the public and private sectors.

KEYWORDS

airport PPPs; procedural values; successful implementation; Middle East; Jordan

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1. Introduction

While the mixture of public and private endeavors is a practice that goes back centuries, the phrase public-private partnership (PPP) originated in the US during the 1940s, when public-private cooperation was encouraged in the redevelopment of downtown areas in US cities (Wettenhall, 2003). By definition, "PPP is a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility." (World Bank, 2023). The term took a global leap forward when Prime Minister Tony Blair labelled Britain's Private Finance Initiative (PFI) as a PPP in order to better secure its political acceptance (Weihe, 2008). The UK government's preference for this approach

then not only transformed the option of private financing for infrastructure into a public policy preference, but in turn boosted the use of PPPs in other countries (Bovaird, 2004). In Anglo-Saxon countries, PPPs have primarily been adopted to address budgetary pressures and enhance efficiency of infrastructure projects, but these projects also represent a natural transition following a long history of privatization and market-based reforms in those nations (Carpintero and Petersen, 2015; Savas, 2000). It is perhaps unsurprising that it did not take long for the PPP phenomenon to transcend regional boundaries and become a “brand” promoted globally by international consultancy firms and organizations such as the World Bank and International Monetary Fund (IMF) (Klijn and Koppenjan, 2016). This promotion is particularly noticeable within the context of developing countries, where PPPs promise to provide access to lucrative funding opportunities for costly mega-infrastructure projects (Fombad, 2019).

However, the importation of PPPs to such countries has been hindered by a lack of rudimentary institutional requirements that would enable their effective implementation (Pessoa, 2007). In relation to this, it has been noted that developing countries pursue PPPs to fulfill three broad objectives: 1) to address budgetary constraints and mobilize financial resources for delivery of critical infrastructure projects that can support economic growth (Foster and Pushak, 2011); 2) to learn from private sector partners and transfer to public organizations the knowhow and expertise to develop and manage complex infrastructure programs (Koppenjan, 2005); and 3) to improve capacity and tackle “inefficiencies in public sector practice that is heavily laden by excessive bureaucracy in government institutions” (Okwilagwe, 2017, p. 465). Nonetheless, within the context of most developing countries, the lack of PPP-related legal and regulatory frameworks often results in an unfavorable institutional environment acting as a deterrent against private sector entities and international investors embarking upon potentially costly PPP arrangements (Ferk and Ferk, 2017). Moreover, Mourgues and Kingombe (2017) state that “getting the private sector involved is not always a happy story” (p. 278) due to several factors, such as the lack of a PPP-enabling environment, a dearth of capacity within public organizations, ideological resistance to PPPs, inadequate legal and regulatory frameworks, and corruption and lack of transparency during the tendering process.

Similarly, the lack of technical expertise within developing countries for delivering PPPs does not offer fertile soil for such projects to flourish. For example, Ferk and Ferk (2017) warn against the adverse outcomes of PPP adoption in developing countries, especially those that do not possess the capacity to evaluate feasibility of the PPP instrument against traditional procurement, and also caution against cases of overestimating project revenues or lowering project costs, which would result in projects that are costly yet vastly inferior in terms of quality. Furthermore, PPPs require considerable expertise in designing and implementing the legal, financial, and technical components of such projects, which are not readily available in the public or private sectors of developing countries (Pessoa, 2007).

Although the driving motivation behind PPP adoption is the achievement of material gains, such as efficiency and value for money, some PPP scholars argue that insufficient attention has been paid to the procedural values germane to such projects, including accountability, transparency, responsiveness, responsibility, and quality (Reynaers, 2014; Weihe, 2008). These procedural values can be defined more specifically as follows. Accountability refers to the capacity of people to hold their representatives accountable for the outcomes of PPP projects and other services delivered

by the private sector on the government's behalf (Bovaird, 2004; Flinders, 2005). Transparency, meanwhile, is an important value that measures individuals' access to reliable, authentic, and trustworthy information regarding the performance, cost, and effectiveness of public services delivered by private actors at the behest of the government (Bloomfield, 2006; Reynaers and De Graaf, 2014). The value of responsiveness is defined as the public sector's capacity to respond to public needs and concerns when services are provided or procured through the private sector, especially when the quality of services does not measure up to the expected levels (Weihe, 2008). Similarly, responsibility denotes whether the public sector maintains responsibility for service delivery when the private sector is engaged in delivering such services on a PPP basis (Reynaers and De Graaf, 2014; De Graaf et al., 2016). Finally, quality measures the general public's satisfaction with the services delivered by the private sector on behalf of the government, and whether the goals of higher value for money through lower costs have been met in a PPP arrangement (De Graaf et al., 2016).

Despite the existence of a voluminous body of literature covering the impact of infrastructure PPPs on the above-mentioned public value within the context of Western countries, scant attention has been paid to this topic in the Middle East and North Africa (MENA) region. Given that the region has hosted numerous PPP projects that were implemented even without the rudimentary legal and regulatory frameworks considered essential for such projects to succeed, a study of PPPs within that region would thus be particularly useful. In light of the above, the underlying research question of this paper is: *What factors should governments in the Middle East adopt to ensure that PPP projects deliver material and procedural public values, particularly in the absence of the institutional and technical capacity that would otherwise support such delivery?*

A highly suitable research context to answer this research question of this paper is the country of Jordan, which embarked upon the Middle East's first successful airport PPP project—Queen Alia International Airport (QAIA)—in 2006, a time when the country did not have the institutional, regulatory, or technical capacity to deliver PPP projects. Nonetheless, despite Jordan's challenging business climate and position as a geopolitically volatile region (IFC, 2017a, 2017b), QAIA exceeded all expectations in achieving material and procedural public values and became a landmark PPP project in the Middle East. As such, unpacking the strategies of the Jordanian government in successfully delivering the project is sure to provide important insights into PPP success factors in that region.

This paper is organized as follows. The next section provides a brief history of PPPs in Jordan and the country's PPP ecosystem and institutional environment, followed by the background of the QAIA project. Then, the planning, procurement, and implementation phases of the project and indicators of its performance are presented. This is followed by a discussion of the macro-level and micro-level factors contributing to the project's achievement of material and procedural values, as well as the prospects of replicating similar outcomes with other PPP projects in Jordan.

2. Review of literature

2.1. PPP projects past and present in the context of Jordan

PPP is a phenomenon that has manifested relatively recently in Jordan as a means to address

budgetary constraints limiting public investment in key infrastructure projects (Mistarihi et al., 2013). Similar to other MENA countries, Jordan implemented several structural adjustment programs recommended by the World Bank and IMF during the 1980s, which entailed the privatization of several state-owned enterprises. In the wake of these reforms promoting greater participation of the private sector in economic and social development, PPPs began appearing in Jordan's policymaking agenda as a potential tool to boost investment in infrastructure. Most recently, the Jordan Vision 2025 explicitly stresses the importance of adopting PPPs to attract foreign direct investments (*Jordan 2025: A National Vision and Strategy*, 2014).

Jordan's adoption of PPPs has been mainly for the purposes of electricity generation, with the exception of a handful of strategic infrastructure projects scattered across other sectors. The earliest adoption of a PPP project in Jordan occurred when the government conducted feasibility studies to deliver Samra Wastewater Treatment Plant on a PPP basis in 1995, but the project was put on hold until construction finally commenced in 2003 (Oxford Business Group, 2015). In light of the deterioration of its public finances since the early 2000s due to geopolitical challenges, including the Iraq War beginning in 2003 and the advent of the financial crisis in 2007, Jordan accelerated its adoption of PPPs to raise private finance for infrastructure projects (IMF, 2017). For example, the year 2003 witnessed implementation of the Jordan Education Initiative, which represented the MENA region's very first PPP arrangement in the education sector (Mistarihi et al., 2013). Furthermore, as shown in **Table 1**, PPP contracts have been awarded for electricity, water and sewerage, an airport, a port, and an information and communications technology (ICT) project, together accounting for over 7 billion dollars in investment. In sum, 46 projects amounting to a total value of US\$10,563 have reached financial closure in Jordan (PPP Knowledge Lab, 2021). The IMF (2017) estimates that approximately 30% of Jordan's public investment portfolio was procured through PPPs, compared with a 6% average in other emerging economies. However, 70% of these contracts are in the electricity or water sectors and are typically government-funded projects requiring the government or a state-owned enterprise (SOE) to make payments during their operation phases (IMF, 2017). Such arrangements shift most of the risk of early termination or inefficient performance to the government, and do not generate income from end users to minimize the financial burden on the public budget in financing projects.

2.2. PPPs' institutional and investment landscape

While PPPs have indeed been adopted in Jordan since the early 2000s, the institutional and regulatory frameworks underpinning such projects have been described as "fragmented and

Table 1. List of PPP projects awarded between 2000 and 2020 in Jordan

Sub-/Industry	Number of projects	Contract value (in US\$ millions)
Electricity	6	4,511
Water & sewerage	1	951
Transportation/airport	1	675
Port	1	705
ICT	1	558
Total	10 projects	7,400

Source: PPP Knowledge Lab (2021).

immature” (Mistarihi, Al Refai, et al., 2012, p. 63). To better enable PPPs, the government began forming a legal framework for them when it issued Privatization Law No. 25-2000 in 2008 to explicitly permit the use of PPPs in infrastructure development and launched studies to investigate projects and sectors that could be suitable for them (Oxford Business Group, 2015). Law No. 31, Jordan’s first PPP law, was then issued in 2014 and followed by a PPP strategy and by-laws in 2015 that established a PPP Council, which is headed by the Prime Minister and counts among its members several ministers and the Governor of the Central Bank. That law also created a PPP unit under the auspices of the Ministry of Finance (IMF, 2017; Oxford Business Group, 2015). Nevertheless, these regulatory and institutional arrangements did not immediately translate into an increased uptake of PPPs, a fact that underscored the law’s limitations and a lack of financial capacity to recruit qualified staff within the PPP unit. Subsequently, Law No. 17 for PPPs was approved in 2020, which added more clarity to the legal framework underpinning PPPs, elevated the PPP Unit to a position under the office of the Prime Minister rather than the Ministry of Finance, and assigned a bigger budget for the PPP Unit so that more experienced advisors could be hired (Abduljaleel and Al Shawwa, 2020).

Despite these advances, the investment climate in Jordan poses challenges to adoption of PPPs across a broader spectrum of social and economic projects. As **Table 2** shows, Jordan ranked 78 globally in “ease of doing business” in 2007, but this ranking deteriorated in 2012 and further in 2019 when it was positioned at 96 and 104, respectively. Similarly, the country ranked 133 in “starting a business”, 83 in “getting credit”, and 75 in “enforcing contracts” in 2007, but its position plummeted in 2012 when it was ranked only 150 in “getting credit” and 130 in “enforcing contracts”. High ranking and performance in these indicators are critical for PPP projects to attract foreign investors and for such projects to effectively deliver on their promises of value for money (Sabry, 2015). Jordan, however, has ranked lower than 100 other countries in doing business indicators, thus pointing to the crucial necessity of creating a business-friendly environment that can attract investment in infrastructure projects. This topic will be examined in more detail through the case of QAIA below.

2.3. QAIA background, planning, implementation, and performance

QAIA was built in 1983 at a location 32 kilometres south of Jordan’s capital city of Amman with a budget of US\$120 million (IFC, 2009). The airport accounts for more than 95% of the country’s air traffic and, with an annual passenger growth rate of 6%, the airport reached its capacity of 3.5 million passengers per year in 2006 and was predicted to exceed 13 million by 2030 (IFC, 2015). Since the airport was “too old and too small to be expanded” (IFC, 2015, p. 2), it was essential to build a new terminal with modern facilities and higher capacity to match the growing demands of

Table 2. Indicators of doing business in Jordan

	2007	2012	2019
Ease of doing business	78	96	104
Starting a business	133	95	106
Getting credit	83	150	134
Enforcing contracts	75	130	108

Source: *The World Bank (2020)*.

air traffic in Jordan.

The expansion of QAIA via the PPP route was motivated by three underlying factors. First, the government was incapable of shouldering the cost of expanding the airport by way of a traditional engineering, procurement, and construction (EPC) contract, and local banks did not possess the liquidity to offer long-term loans (IMF, 2017). As such, the PPP route offered an attractive alternative method of rehabilitating and modernizing the existing facilities while also engineering, constructing, operating, and maintaining a new terminal building through a build, operate, and transfer (BOT) model (Mistarihi et al., 2013). The PPP arrangement would be able to raise 100% of the funds needed for the project through international banks and investors (IFC, 2009) and generate significant annual revenues for the government from the concession contract.

Second, expansion of the airport and effective operation of its facilities and landing slots would significantly increase its capacity and enhance the quality of its services. This expansion via the PPP model was designed in two phases that would see the airport increasing its capacity from 3.5 million to 6 million passengers per year in the first phase, and then raising its capacity to 12 million passengers per year in the second. Furthermore, involvement of the private sector in airport management promised to transfer the private sector's "know-how to one of the most significant service sectors of the Jordanian economy" (Mistarihi, Al Refai, et al., 2012, p. 64), and also improve the quality of existing facilities to provide passengers with a better travel experience.

Third, developing an international airport with increased capacity to cater to higher air traffic and freight would support economic growth and the tourism industry. In relation to this, the Jordan Strategy 2025 aims to transform the country into an influential business hub with regional links and cross-border trade in the Middle East, and the World Bank estimated that the new airport would bolster government efforts to accelerate economic growth by attracting more than US\$1 billion in investment and creating more than 23,000 jobs (IFC, 2015). Furthermore, the tourism sector is particularly essential to Jordan's economy, as it contributes up to 20% of the GDP, and the government has accordingly devised a strategy to double its tourism revenues from US\$3 billion to US\$6 billion by 2015 (AIG, 2013a, 2013b, 2013c).

3. Methodology

This paper adopts a single case methodology (Yin, 2014) which offers a robust methodological approach to investigate the success factors of this PPP project. Single case studies offer the opportunity to unpack the variables that contribute to a certain outcome, and in this paper, it offered a sound methodological approach to observe the factors that led to the success Alia International Airport to achieve the expected procedural values. The paper's analysis is based on desk research that comprised government reports, consultancy reports, financial documents and statistical data from numerous public and private entities.

4. Findings

4.1. Ingredients of PPP project's success

As described above, Jordan considered PPP to be a reliable pathway toward financing and

managing QAIA due to the financial constraints faced by the country. The nation had experienced particularly severe economic difficulties during the 1980s, which resulted in government debt climbing to 174% of the GDP, and so the World Bank introduced a structural adjustment package that recommended privatizing 14 SOEs in several sectors (PFIE, 2008). Consequently, the government debt fell steadily to just 60% of its GDP in 2008, and the government continued its commitment to engage the private sector in the economy by enacting the Privatization Law in 2002 (Oxford Business Group, 2005). Because Jordan still “lacked the financial resources and experience to embark on a renovation and expansion of its international airport” (IFC, 2017a, p. 1), however, it followed the World Bank’s advice that suggested structuring the project as a 25-year BOT contract. Accordingly, the World Bank provided funding for the appointment of the International Finance Corporation (IFC) as lead advisor under the auspices of the US Agency for International Development trust in 2006 (PFIE, 2008). IFC then collaborated with the Executive Privatization Commission, Ministry of Transport, and Civil Aviation Authority to ensure a smooth process in procuring the country’s first PPP project in the transportation sector (IFC, 2015).

The procurement process for QAIA was thus able to attract experienced international firms and commercial banks, and the Ministry of Transportation hired UK’s Fosters and Partners as its design consultant. However, given the high political risks and uncertainty in the Middle East, international commercial banks were hesitant to provide long-term financing without the direct involvement of a development finance institution such as IFC (PFIE, 2008). As a result, IFC was appointed as both senior lender and lead arranger and advisor to the government throughout the entire procurement process. The involvement of IFC assured international commercial banks and investors that the bidding process would be a fair and transparent one following international best practices and IFC also helped design a strong business case for the airport by commissioning traffic reports from independent advisory organizations that provided a reliable and trustworthy forecast of the airport’s revenue stream. Since 60% of the airport’s traffic was channeled through the country’s profitable and successful national carrier Royal Jordanian Airlines, international investors were confident that the revenues and profitability of the airline would continue to rise, especially after its entry into the One World Alliance (PFIE, 2008). The Request for Expressions of Interest (REOI) to upgrade and expand the airport was issued in June 2006 and resulted in 28 responses, after which the Transport Ministry and IFC shortlisted six consortia to bid for the project (MEED, 2006).

In addition to a strong technical proposal, the bid was awarded in May 2007 based on the highest concession fee, which was offered by Aéroports de Paris (ADP) and its consortium that comprised several multinational companies with extensive experience in managing airports in Europe and the Middle East (IFC, 2009). The concession fee entailed an initial fee of US\$1 million to be paid to the government upon signing of the contract, and an annual fee of 54.47% of gross revenues would be paid for six years, followed by 54.64% until completion of the contract period (MEED, 2007a; IFC, 2009). Six months after the project was awarded, the successful consortium established a special-purpose entity (SPE)—Airport International Group (AIG)—to carry out the project concession and achieved financial closure of the project by securing US\$750 million through a combination of equity and debt (MEED, 2007a, 2007b). While AIG provided US\$370 in equity (IFC, 2017b; Norton Rose, 2009), IFC offered a total of US\$120 million in conventional lending, arranged a syndication of US\$160 million from international commercial banks, and helped secure US\$100 million from the Islamic Development Bank (MEED, 2007b; IFC, 2017b). Furthermore, in mid-

2014, IFC spearheaded the US\$100 million financing for the second phase of modernizing and rehabilitating the airport's facilities by providing an additional US\$68.8 million and secured the remaining US\$30 million from international banks (Euromoney Institutional Investor, 2014; AIG, 2010b).

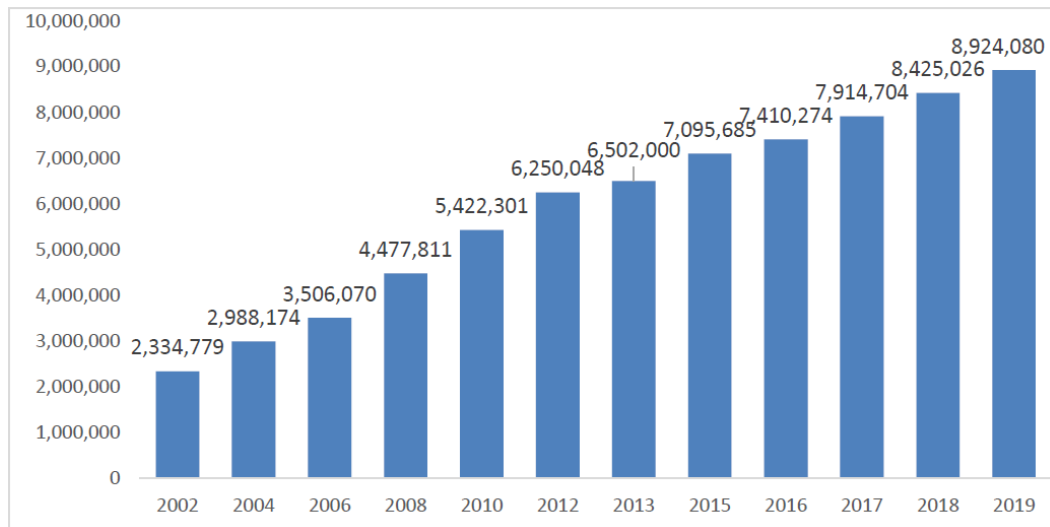
The project's implementation process was uneventful overall, although there was a delay of two years in construction and delivery of the first phase of the project. The initial planning of the project estimated completion of construction by early 2011; however, this was extended until March 2013 (MEED, 2011). The delay stemmed from a design variation that was proposed by AIG, which had concluded that the space for commercial activities was too small to accommodate the airport's increasing traffic and required amendments. While AIG was obliged under the contract to abide by the concept design that had been prepared by Fosters and Partners, during the project implementation stage, AIG had found the initial design unsuitable to accommodate the growth of the airport (AIG, 2013a). Furthermore, AIG requested two stages for the new terminal rollout: 1) constructing the new terminal and all related facilities and 2) demolishing the old terminal after the gradual opening and operation of the new one (MEED, 2011).

In spite of these unexpected alterations to the initial planning and implementation of the project, the public and private parties involved in the project engaged in effective dialogue, collaboration, and trust in discussing and re-negotiating their contractual obligations and expectations (AIG, 2017). The project sponsors, lenders, and stakeholders all conducted a careful revision of the impact of re-scheduling the airport's completion on traffic movement and projected revenues and amended the project contract accordingly (IFC, 2017a). The new terminal's full operation was then launched in March 2013 (AIG, 2013b), paving the way for initiation of the second phase of the airport, which began as planned in January 2014 and was successfully completed on time and within budget in September 2016. This second phase extended the airport's capacity to 12 million passengers annually.

4.2. Project performance

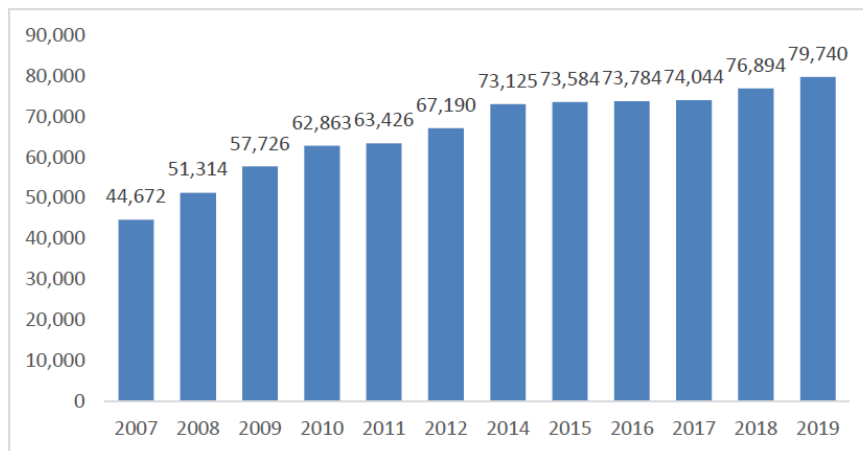
There were three primary objectives behind adopting the PPP model for QAIA. The first was to raise from the private sector more than US\$850 million in order to finance the rehabilitation and expansion of the airport. The second was to increase the capacity of the airport from 3 million passengers annually to 6 million in the first phase of the expansion, and then to 12 million after the completion of its second phase (AIG, 2017). The third objective was to generate government revenues from the airport's gross income and increased capacity, higher tourism revenues, and air traffic movement that were expected to support economic growth in Jordan (IFC, 2015). Based on the performance indicators of the airport, this section offers an analysis of the project's capacity to deliver its objectives and achieve its expected material values.

To begin with, the number of passengers at the airport has witnessed a sustained and drastic increase since the beginning of its operation by AIG in 2007. As illustrated in **Figure 1**, the airport catered to more than 4.4 million passengers in 2008, as compared to just 3.5 million in 2006, and witnessed a steady double-digit growth rate thanks to effective management and operation by the private sector (AIG, 2010b). A milestone achievement was marked when 6.2 million passengers annually were reached for "the first time in the airport's history" in 2012, one year ahead of the project's second phase launch that would see the inauguration of the new terminal (AIG, 2013a, p. 1). The airport continued to achieve remarkable growth, and this was particularly notable in



Sources: CEIC Data (2021); AIG (2009a, 2019b, 2019c, 2010a, 2010b, 2011a, 2011b).

Figure 1. Number of passengers arriving at Queen Alia International Airport.

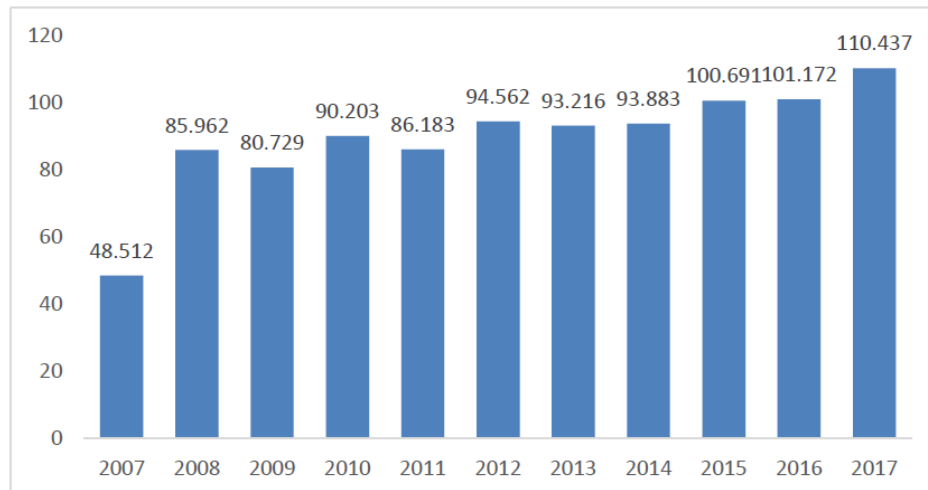


Source: CEIC Data (2021).

Figure 2. Aircraft movements at Queen Alia International Airport.

August 2018 when the airport crossed “the one million passenger mark [in a single month] for the first time in its history” (GlobalData, 2018, p. 1). In fact, the airport’s performance exceeded the traffic forecasts of investors and lenders, who projected an average annual growth of 4.7%, while the actual growth averaged 7.7%—clearly a testament to the efficient manner in which the airport’s new management attracted and managed higher levels of traffic (IFC, 2017b). As a consequence, AIG has begun planning a third stage of expansion to cater to 16 million passengers the airport is expected to host annually by 2032 (Awsat, 2017).

Furthermore, aircraft movements at QAIA have witnessed a considerable increase in growth rate since AIG started its operations in 2007. As **Figure 2** illustrates, aircraft movements increased to 51,314 in 2008 (a 15% increase over the previous year) just one year after the private operator took over management of the airport. Growth continued in 2009 when the airport recorded 57,726 flights, representing a year-on-year increase of 12.6% (AIG, 2010b). This growth resulted from the effective management of landing slots as well as the introduction of new routes and airlines. A mere six



Source: CEIC Data (2021).

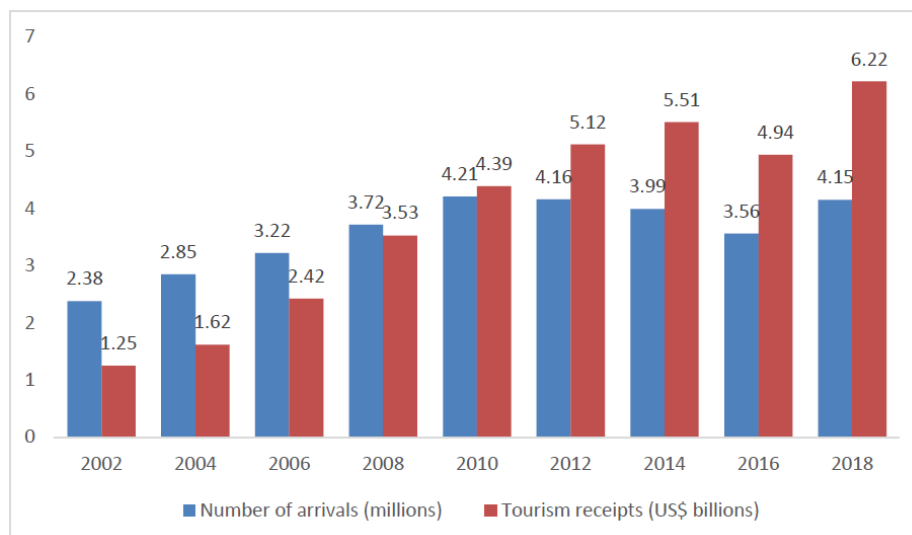
Figure 3. Jordan air cargo traffic at Queen Alia International Airport (thousands of tons).

months after private operation of the airport began, more than 20 new airlines from Europe, North America, and Asia were granted licenses to land at QAIA, thus expanding the international reach of the airport and its operations (AIG, 2009a, 2009b).

Air cargo traffic also saw rapid growth after commencement of the BOT agreement. As shown in **Figure 3**, air cargo traffic rose to 85.9 million tons in 2008 (an increase of 56% over the previous year), and cargo traffic doubled compared with 2007 by exceeding 100 million tons in 2015, thereby contributing to an additional US\$14.3 billion in exports. This growth can be attributed primarily to the new airport facilities, increased rate of foreign direct investments, and new international routes to Asia, North America, the Middle East, and Europe (AIG, 2016, 2019). In 2018, the five busiest air cargo routes were from Qatar, the United Arab Emirates, Turkey, the US, and the UK (IATA, 2018).

The number of tourist arrivals at the airport has also seen a steady increase since the start of private operation and management, which has translated into higher tourism receipts. As illustrated in **Figure 4**, the number of tourist arrivals in 2008 reached 3.72 million and this number increased to 4.21 million in 2010 despite the impact of the financial crisis on international travel. Jordan also managed to maintain a flow of 4 million tourists between 2012 and 2018 in spite of political instability that rocked the region as a result of the Arab Spring movements. Overall, tourism receipts have continued to register remarkable and steady growth since 2008. Figure 4 also shows how tourism revenues increased from US\$3.35 billion in 2008 to US\$5.51 billion in 2014, thereby successfully achieving the government's goal of doubling tourism revenues by the end of 2015 (AIG, 2011a). In 2018, tourism receipts exceeded US\$6 billion and fulfilled the government's ambition to boost tourism and economic growth, as 5.7% of GDP growth was directly attributable to air transport and foreign tourist arrivals by air (IATA, 2018). Furthermore, growth in the tourism industry contributed to the creation of 17,000 direct jobs, 9,000 jobs in the supply chain, and 38,000 jobs in the tourism industry (IATA, 2018).

A significant indication of the QAIA PPP project's success can be found in the concession fees received by the government from the airport's gross annual income since the project's inception.



Source: World Bank Data (2021).

Figure 4. Number of tourist arrivals and tourism receipts in Jordan.

In 2018, for example, the government received a concession fee of US\$143 million, and an additional US\$92 million from a special tax on tickets, and from 2007 to 2019, the government has accumulated concession fees worth US\$1.2 billion and special ticket taxes totaling US\$820 million (Awsat, 2017). The airport increased its number of employees by 40% since the new management took over, and continuous training and professional development are provided to them in order to ensure delivery of world-class services to customers (Mistarihi et al., 2013).

The high quality of QAIA's facilities has been recognized through numerous awards received since its private operation commenced. As listed in **Table 3**, the airport has been recognized for the improved quality of its facilities, operations, financial and technological innovations, and outstanding customer services provided to passengers (AIG, 2013a, 2013b, 2013c). Moreover, QAIA rankings in major airport quality surveys have improved remarkably since its management under a private operator. For example, in 2013, QAIA ranked 44th in the Airport Service Quality (ASQ) survey compared to its position at 186 in previous years (AIG, 2013d, 2013e). Furthermore, Airports Council International ranked QAIA first in the category of "Best Improvement by Region: Middle East" in 2014, thus testifying to the effectiveness of the airport's transformation under private sector operators (AIG, 2014a, 2014b). Similarly, ASQ ranked QAIA first in the "Best Airport by Size and Region: Middle East" category in 2014 (AIG, 2015).

The following section discusses QAIA's performance in achieving expected procedural values through the PPP arrangement, as well as the mechanisms that were put in place to enable fulfillment of those public values.

4.3. Achievement of procedural public values through the PPP project

QAIA achieved its expected procedural values via the PPP arrangement due to several factors that saw both government and private actors collaborating during the initiation and implementation phases to achieve a successful partnership (summarized in **Table 4**). This section will discuss how these values were achieved and the mechanisms behind them.

Table 3. Queen Alia International Airport international awards

Year of award	Name of award	Significance of award for project
2009	ISO 9001/10002 and 14001 Certification for airport operations and quality management systems	Recognizes AIG's improvement of the airport's operations, provision of high-quality services, meeting of customers' and airlines' expectations, and use of efficient management systems.
2013	Gold recognition as Best Emerging Market Infrastructure Project for Europe, Central Asia and MENA in Emerging Partnerships	Names QAIA as one of the world's 40 top PPP projects in 2013 for quality, performance, and efficiency of services provided.
2019	Best Airport by Size and Region: Middle East	Recognizes outstanding customer experience in 34 key performance indicators, including check-in, security, quality of duty-free outlets, and food and beverage areas.
2020	Best Airport by Size and Region: Middle East (second consecutive year)	Recognizes continuous improvement of quality of services provided to customers and strict quality control procedures.

Source: (AIG, 2009a, 2009b, 2013b, 2014c, 2015, 2019).

Table 4. Mechanisms used to achieve procedural public value at QAIA

Procedural public values	Mechanisms for achieving procedural public value
Accountability	<ul style="list-style-type: none"> The BOT model enables the government to maintain control over the project. Clear monitoring mechanisms put into place to evaluate performance of private operators and hold them accountable for any breaches of contract. Auditors from Ministry of Finance, IFC, and other independent organizations regularly check performance of private operators.
Transparency	<ul style="list-style-type: none"> Involvement of IFC in procurement and implementation of the project as lead advisor and lender enhances transparency of the process. Strict anti-corruption measures put into place to prevent interference in the bidding process. Traffic forecast and financial performance of the airport conducted by several independent organizations. Data on financial and operational performance of the airport published monthly and accessible to individuals and organizations. Media and journalists allowed to visit the construction site and observe and report on project progress.
Responsiveness	<ul style="list-style-type: none"> Ministry of Transportation, Ministry of Finance, and Ministry of Public Works and Housing form committees to monitor the project's performance and directly interact with private operators to ensure public concerns are properly addressed. Airport passengers participate in quarterly surveys administered by private operators as well as independent international organizations to evaluate customer satisfaction and report on any complaints or dissatisfaction with offered services.
Responsibility	<ul style="list-style-type: none"> IFC and project advisors design the comprehensive BOT contract specifying contractual responsibilities and obligations of public and private parties. Relevant ministries regularly communicate with private operators to ensure adherence to contractual obligations and delivery of promised deliverables. Regular meetings take place between public and private parties to discuss any emerging challenges and strategic direction of the project and its overall technical, financial, and operational performance.

Table 4. (Continued)

Procedural public values	Mechanisms for achieving procedural public value
Quality	<ul style="list-style-type: none"> • The transparent and effective procurement process led to selection of competitive bidder with best financial and technical proposals. • Effective dialogue, communication, and collaboration resulted in a smooth process of negotiating, designing, and implementing the successful PPP project. • Experienced consortium comprising globally recognized leaders in design, construction, and operation of airports delivered state-of-the-art airport that exceeded expectations.

Source: Authors.

From the outset of the project planning process, IFC acted as an independent organization overseeing the accountability and transparency of the PPP project (IFC, 2009, 2015). IFC's presence was especially crucial in light of Jordan's historically low performance in the key indicators of transparency and accountability, as well as the hesitance of international commercial banks to provide long-term loans without the involvement of a trustworthy development organization that could fill any prominent institutional gaps (PFIE, 2008). As such, IFC ensured that the QAIA procurement and implementation processes were conducted in accordance with international best practices despite Jordan's lack of a PPP-enabling environment in 2006. Furthermore, IFC wisely recommended adoption of the BOT model for the project because it would establish an effective equilibrium between the government's ownership and control over the project, while simultaneously safeguarding the private sector's autonomy in operation and management of the airport (IFC, 2017a, 2009).

Additional mechanisms were also put into place to ensure adherence of both the government and private sector to strict transparency mechanisms. First, IFC emphasized the importance of a transparent bidding process that would assure lenders, investors, and commercial banks that the core values underpinning PPP projects would be respected and observed, and that anti-corruption mechanisms would be followed by all public and private parties. Furthermore, the government established monitoring mechanisms and empowered auditors from the Ministry of Finance and IFC to continuously assess the private operator's performance against the key performance indicators that were agreed upon in the BOT contract. On the private sector's side, AIG provided access to quarterly financial statements and airport traffic performance reports, and published key achievements of the SPE in line with its contractual obligations and clauses of confidentiality.

Procedural values of responsiveness and responsibility were also achieved by QAIA thanks to the government and private sector's effective collaboration. For instance, the BOT agreement included clear clauses that stipulated the government's role in monitoring the private sector's performance and mobilizing committees to investigate any issues raised by the public. Regular customer satisfaction surveys were conducted by the government, the private operator, and independent organizations as well, all of which reflected the public's satisfaction with the services. Additionally, the contractual responsibilities and obligations of both the public and private actors were clearly articulated in the BOT contract, while regular meetings and active engagement between the various parties involved in the project further facilitated the fulfillment of those duties.

Finally, the superior quality of the PPP project is unquestionably evident in its high-performance indicators and growth trajectory. The key mechanism leading to achievement of the procedural

value of quality was the competitive selection of a competent and globally recognized consortium of companies specializing in the design, construction, operation, and management of airports. Furthermore, effective dialogue, trust, and communication among the numerous actors involved in the PPP project also contributed to the high levels of performance that were achieved (Mistarihi, Al Refai, et al., 2012; Mistarihi et al., 2013).

Given the lack of institutional capacity to administer PPPs in Jordan in 2006 when the project was initiated, what were the factors that contributed to this success story? The following section presents the key success factors that culminated in the successful implementation of QAIA and its superior performance.

5. Discussion

The factors contributing to the successful implementation of QAIA can be categorized into macro-level factors related to political support facilitating the administrative aspects of the project and micro-level factors related to management of the quotidian activities of the partnership between the public and private actors.

5.1. Macro-level factors related to political support

The primary success factor behind QAIA was the unflinchingly high level of commitment and political support that it received from the King of Jordan, who specifically championed the process of initiating and implementing the project (The Economist Intelligence Unit, 2017). The King ordered several ministers to streamline the initiation and implementation processes of QAIA and to personally monitor the performance of the project, and the Prime Minister represented the King during the handover of the airport from the public to the private sector in November 2007 (AIG, 2007). Later, the Prime Minister visited the airport in October 2009 to “check on the progress of the project” and “stressed the importance of completing the project in a timely manner, reiterating the government’s support for the venture” (AIG, 2009a, p. 1). Furthermore, the Minister of Transportation and Minister of Energy and Mineral Resources called on the airport in 2012 to evaluate its progress and convey the King’s continuous support for the project and its significance to the country’s economic growth (AIG, 2012). The Minister of Transportation further indicated that QAIA was “a true implementation of the King’s vision of actualizing a true partnership between the public and private sector” (MENA Financial Network, 2018), and that the fruition of the project would represent the implementation of the King’s vision. When the construction of the airport was completed, the King inaugurated it as a testament to the success of his personal ambitions to institutionalize the PPP instrument as a viable source of funding public infrastructure projects (AIG, 2013c).

Similarly, the second phase of the airport expansion was initiated by the Prime Minister and Minister of Transportation, who closely monitored the project’s progress and regularly visited the construction sites to ensure timely completion (AIG, 2014a). At the ceremony inaugurating the airport’s second phase launch, the Crown Prince was in attendance to emphasize the QAIA PPP project’s importance as a success story that could lead to further adoption of the PPP route in mega-infrastructure projects (Malkawi, 2016). Such high-level political support was critical to the success of the project, since it effectively removed the bureaucratic and administrative hurdles that

typically hinder PPP uptake in the MENA region. When relevant institutional, legal, and regulatory frameworks were lacking and a challenging environment for doing business, particularly for foreign investors, was the norm, political support at the ministerial level was critical to provide the necessary exceptions from traditional procurement laws and regulations that were not supportive of PPP arrangements.

5.2. Micro-level factors related to PPP project management

The involvement of IFC in the project was also a critical success factor because it ensured the existence of best practices, good governance, transparency, accountability, and fair bidding and award of the project. IFC was involved in a multitude of tasks that effectively cut across government and private domains and played a role as facilitator of communication, negotiations and enabler of constructive dialogue to solve any emergent challenges during the initiation and implementation of the project. This involvement in the mundane quotidian activities of the project was instrumental in that it provided the expertise, quality assurance, and trust that were critical to carrying the project forward (IFC, 2017b).

The appropriate allocation and management of project-related risks contributed immensely to the success of the QAIA project. The political risks associated with doing business in the MENA region and the prospects of political instability and terrorist attacks tend to actively discourage investors and lenders from engaging in long-term contractual relationships in those countries without appropriate risk sharing and government guarantees (Mistarihi et al., 2013). However, IFC negotiated agreements between the government and private actor that stipulated that in the case that war, force majeure, or political instability should directly affect the performance of the airport, the concessionaires could cancel the contract and the government would assume the project's debt obligations and repay the sponsor's equity (PFIE, 2008). This risk arrangement encouraged international commercial banks to approve loans for the SPE and provide financial support throughout the project's 25-year contract. Furthermore, market risk was assessed through the commissioning of several traffic forecast reports that evaluated the airport's potential to generate revenues and profit and to sustain a steady rise in the number of passengers (IFC, 2009, 2017a). Other risks associated with the project were also effectively negotiated among the various public and private parties involved in the project.

The adoption of purposefully designed strategies to address differences between the public and private sectors was instrumental to the success of the QAIA project. For example, Mistarihi and colleagues (2013) found that, during the implementation and operation of the PPP project, several internal and external management difficulties arose, including issues with public employees' lack of experience in managing PPPs, human resource management challenges, coordination and communication gaps, changing circumstances, and external pressures to adopt certain managerial practices or project-related specifications. However, investment in development and training of employees to adopt better managerial practices for running the airport, improvement of their working conditions, and recruitment based on merit and experience as opposed to patronage all enhanced the quality and readiness of the airport's workforce to adopt international best practices in operating QAIA (Mistarihi et al., 2013).

6. Conclusion

Although the QAIA PPP project was a success, it was nevertheless the exception rather than the rule within Jordan's PPP landscape, and its replication in other sectors will require establishment of the institutional, legal, and regulatory frameworks, as well as reforms of machinery of government, necessary to accelerate the implementation of PPPs. The high-level political involvement of the King and his ministers in the QAIA was clearly the key to its success, supplemented, of course, by the airport's strong business case, yet similar political commitment to other infrastructure PPP projects will likely prove to be a challenge, hence the importance of creating an investment-friendly ecosystem that would better enable uptake of PPPs across a broader spectrum of sectors.

In light of the above, encouraging PPPs in a wider range of economic and social projects, such as highways, bridges, hospitals, and schools, would necessitate a fundamental shift in how the government procures public services. It would also require reformation of the laws governing foreign investment and amelioration of existing bureaucratic hurdles that currently delay the issuance of permits and licenses to the private sector. Furthermore, enablement of PPPs would require a robust legal and regulatory system that facilitates their administration, as well as the institutional and human capacity to tender and procure projects on a PPP basis. Additionally, PPP projects' success would require the existence of a powerful monitoring system to ensure that the financial and procedural values of PPPs are both achievable and maintained over the course of their contracts. The presence of these PPP prerequisites would thereby assure international commercial banks and lenders that Jordan is a safe environment in which to conduct business and embark upon long-term infrastructure projects.

Conflict of interest

The authors declare no conflict of interest.

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