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Do restrictive regulatory policies matter for telecom performance? Evidence from MENA countries

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ABSTRACT

The past decade has witnessed a significant transformation in trade and regulatory policies of the telecom sector across the Middle East North Africa (MENA) region. Many countries committed to opening up their telecom sector for trade and investment under WTO commitments. However, these commitments do not always reflect actual policies. Although some MENA countries started alleviating telecom market restrictions and tended to adopt more open policies, other countries are still reluctant to change and adopt highly restrictive policies limiting foreign ownership and control in the market. This paper assesses the impact of telecom restrictions on landline and mobile sector performance in MENA countries using the World Bank Services Trade Restrictiveness database (STRD). We use three-stage least squares-seemingly unrelated regression (3SLS-SUR) to test for the effect of restrictions and the level of competition in the telecom sector on selected performance indicators. Our findings suggest that restrictive policies in the telecom sector are rather likely to affect landline than mobile communications. Moreover, being a MENA country affects the level of competition in the landline market. MENA countries are very protective to their incumbent operators, irrespective of the stipulated market regulations in place.

1. Introduction

Since the 1980s, the services sector has gained worldwide importance with a growing contribution to global output. Trade in services has also largely evolved during the past two decades due to developments in technology and deeper global integration. Among the most protected sectors are those highly sensitive to national security or national sovereignty considerations, such as telecommunications, air and maritime transport, finance, public utilities, and media (Golub, 2003).

The telecom sector has traditionally been subject to a set of relatively complicated regulations due to its specificities in terms of high level of investments, economies of scale, and monopolistic character. In most developing countries, the telecom sector is particularly known for high barriers to entry, including difficult and costly licensing procedures, restrictions on foreign ownership, and high restrictions on operations. Since the 1980s, developing countries have carried out a series of reforms to their telecom sectors. Independent regulators were established, local incumbents were privatized, and foreign investments were allowed into the market. The Middle East and North African (MENA) countries also pursued these reforms, yet with a time lag: countries in started telecom sector reforms in the mid-90s and some remain reluctant to change. According to the World Bank, MENA oil-rich States have the most protected markets, whereas some of the poorest countries of the region are remarkably open.

The objective of our paper is to assess the impact of telecom restrictions on sector performance. We also seek to find out whether the General Agreement on Trade in Services (GATS) commitments serve as a guarantee for better sector performance, and whether telecom restrictions affect MENA and non-MENA markets in a similar way.

We believe our study is important since services restrictions in developing countries are not well explored due to the scarcity of data. With the exception of Borchert et al. (2012), no recent study has, to our knowledge, either tested for the effect of policy restrictions in the telecom sector on a micro level for a large set of developing countries or covered more than a few MENA countries in the analysis. Three older studies (Boylaud and Nicoletti, 2000; Doove et al., 2001; Fink et al., 2003) tested for the effect of restrictive policies at the micro-level; these studies are not relevant for the developing countries and use less comprehensive restrictiveness indexes. Hence, we enlarge the scope of the analysis by including a larger set of developing countries, with a focus on the MENA region.

While previous studies mainly rely on GATS commitments to estimate the degree of market openness, it is not uncommon that these

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provide a poor reflection of reality. Sometimes, actual policies are more restrictive than GATS commitments. More importantly, commitments to liberalization tend be offset by restrictive behind-the-border regulations. We use the World Bank Services Trade Restrictiveness Database (STRD), which provides a more comprehensive coverage of *actual* trade policies and internal regulations for a set of 24 developed and 79 developing countries to carry out our analysis. We also address the endogeneity problem of telecom policies that was mostly overlooked in previous studies, by adopting a 3SLS estimation procedure.

The paper is organized as follows: Section 2 provides an overview of telecom restrictions with a focus on MENA countries. The review of previous studies is presented in Section 3. Section 4 presents the data and the empirical model. In section 5, we discuss the results of the model. Finally, we provide some concluding remarks and policy recommendations in Section 6.

2. The telecom sector in MENA countries: overview

The past decade has witnessed a significant transformation in trade and regulatory policies of the telecom sector across the MENA region, opting for open markets with the goal of more efficient service provision. Although the MENA region can be considered as one entity in terms of geographical expansion, similar political challenges and cultural and historical characteristics, MENA countries show differences in terms of their income level, demographics, but also in terms of different paces of reform and levels of market openness.

The telecom sector is a vital service sector for the region's economic development. Since the early 2000s, the telecom sector has been the only sector with high technological input to reach strong investment volumes in MENA (Gatti et al., 2013). According to the Mobile Economy Arab States report (2015), mobile operators in the MENA region have largely invested in improving network coverage and capacity and deploying higher speed mobile broadband. Investment levels are expected to increase further with the expansion of 4G networks.

Market openness is therefore key to ICT sector development, which holds a big promise of realizing high economic growth in the MENA region. Thus, the actual state of trade in telecom services and prospects to further liberalization are two issues of vital importance.

2.1. Telecom reforms in MENA region

Prior to reform, MENA telecom markets have often revealed two main features: absence of separation between regulation and provision, and the predominant role of the state. Until the mid-nineties, state-owned incumbent operators monopolized the MENA telecom markets, and independent regulatory bodies were largely absent. These two features were behind a modest level of sector performance in the region. The inability of the incumbent operator to expand its network, in addition to the increasing demand for landlines both resulted in an increasing unmet demand and long waiting lists. Installation fees were relatively high by international standards and the quality of maintenance was low. According to Ghoneim (2008), waiting for a landline in Egypt could take up to two years, and installation fees were as high as 1180 US$ in 1997. In 1995, the average unmet demand in MENA countries reached 448,843 lines on the waiting list, additionally, the number of faults reached up to 40.9 per 100 lines annually (ITU, 2010).

Technological developments and the worldwide boom in telecom sectors emphasized the need for MENA countries to address these challenges and to carry out serious sector reform, if they wished to fit into the new globalized world economy.

The first independent regulatory authority in the region was established in Jordan under the name of the “Telecommunications Regulatory Commission (TRC)” in 1995, followed by Morocco in 1997 and Egypt in 1998. The most recent independent regulator was established by Qatar in 2004 (ITU, 2014). As shown in Table 1 and 3 of the 14 MENA countries studied in this paper still suffer from a lack of regulatory independence: in Kuwait and Yemen, the Ministry of Communications is in charge of regulatory functions, while in Iran, the regulator is subordinate to the ministry. The regulatory framework in the remaining MENA countries also reveals some drawbacks: with the exception of Jordan, decisions of MENA regulatory bodies are not fully independent from the government, and, in some cases, from state-owned operators. In Egypt, for example, the regulator (though structurally independent) is headed by the Minister of Communication and Information Technology, and the members of its Board of Directors are appointed and dismissed by the Prime Minister. In other countries, key decisions affecting competition in telecom markets, such as licensing of new operators, are either exclusively taken by the Ministry of Communications (as in the case of Tunisia) or are taken jointly by the ministry and the regulator (the case of Morocco, Oman, Qatar and Algeria). The same applies to financial independence, which affects the ability of the regulator to make independent decisions (El-Haddad and Attia, 2012). There are also some successful experiences. The Bahraini regulator, for instance, enjoys full financial autonomy. On the other extreme, the Lebanese regulator fully relies on funds allocated by the government. In Oman and Saudi Arabia, regulators are partially funded by the government (ITU, 2014).

The second component of sector reform, privatization, has been carried out only recently. As shown in Table 1, with the exception of Jordan's operator, privatization of the state-owned incumbent has only been partial for 8 out of 14 countries, while in the remaining countries (Iran, Lebanon, Algeria, Kuwait, and Yemen), the incumbent is still fully owned by the State. In the case of Egypt, only 20% of the incumbent, Telecom Egypt, has been privatized, although a share of 49% is stated in Egypt's schedule of specific commitments.

In six MENA countries (Egypt, Morocco, Tunisia, Jordan, Turkey and Oman), reform included international commitment to liberalization of domestic telecom markets by signing the Basic Telecom Agreement (BTA)[1] (Table 1). Some remain reluctant to change and, despite their commitments, reveal high levels of protectionism. The market for fixed telephony in MENA countries has currently six monopolies (Algeria, Egypt, Iran, Kuwait, Lebanon and Yemen). A successful example for liberalization is that of Bahrain, with a highly competitive market of more than 6 landline operators. Meanwhile, the market for mobile communications enjoys a higher level of liberalization and competition. Since the late nineties, the mobile market in the region was open for national and foreign competition and foreign equity limits have been largely relaxed. In this context, Egypt was the first to liberalize the mobile market with the licensing of two mobile operators in 1998, followed by Kuwait in 1999, Jordan and Morocco in 2000. The average number of mobile operators in the MENA region is three. There is an obvious gap, however, in the degree of openness in the mobile market among MENA countries. Table 2 shows that the Gulf Cooperation Council (GCC) countries generally adopt less open trade policies with restrictions on foreign equity participation, nationality of Board members and the legal form of establishment. The Qatari market, for instance, is completely closed to foreign investments and foreign equity participation. To the contrary, non-GCC countries (such as Egypt, Turkey, Jordan, Tunisia, and Morocco) are generally more open to foreign investments and have less or no limitations on licensing and foreign equity participation. They tend to protect historic landline operators from competition by imposing restrictions to entry in the landline sector, and to maintain their ownership by limiting the privatization of public entities to less than 50%. As depicted in Table 2, the maximum foreign equity participation in the Egyptian and Bahraini state-owned incumbent is 49%, while in Kuwait, Oman, and Qatar, no

[1] The Fourth Protocol of the GATS, also known as the Basic Telecommunications Agreement was issued in 1997 and entered into force one year later. According to this agreement, Member countries are to list their specific commitments regarding basic telecom services, as well as any exemptions from GATS Article II on the principle of the Most Favoured Nation.