Causes and Effects of Foreign Direct Investment in South Asia

Tomaz Dentinho and Joaquim Ramos Silva

1 Investment, Cooperation and Development

Those who study the rise of Asia tend focus on economic development in Eastern Asia, Asia-Pacific Rim or, more recently, individual studies of big countries such as China, India and Indonesia. South Asia, particularly its continental shore, although an important part of the process, is often forgotten in these endeavours. This is perhaps due to the large heterogeneity of Asia, but its Southern territories are essential for several reasons, including geopolitical, population, and natural resources. Moreover, in the long run, after the experiences of Singapore and China during the last decades, the relation of Asian economies with foreign direct investment (FDI) became one of the most important strategic instruments to catch up with more advanced economies (Ozawa 2011). But, even from this perspective, diverse paths were followed (for example, in South Korea and Taiwan development processes, FDI was negligible but foreign aid was not; Ranis 1995), and South Asia did not fully take part in these trends or, at best, loosely integrated in the "flying-geese" pattern under the leadership of countries outside the region (Akamatsu 1962; Kojima 1985, 2000). In these circumstances, the present paper proposes to fill the gap with a comparative perspective, looking more carefully at the role played by FDI in the continental part of South Asia. More specifically, the countries we shall focus on in this study are... In spite of their heterogeneity, at the regional level, the countries of the sample have some common characteristics. For example, compared to the first waves of "Asian dragons" they clearly lagged behind, as a consequence of their lack of economic growth (despite strong recent progress in some cases),

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they are less integrated in global economy, and have, on the average, a much lower GDP per capita. Notwithstanding this, what matters most is these countries' push to move forward, particularly evident in the 2000s, and the fact that these changes take place in a rapidly changing context. Due to their global importance (geopolitical, population, strategic, and increasingly economic), all this may have significant consequences, not only in the region itself, including its advances towards integration, but also on a global scale.

Taking into account its long-term character and implications, the study of FDI has attracted increasing research work, either theoretical or empirical. Since the 1960s, when Hymer (1960) first proposed an accurate notion of FDI (clearly differentiated from theoretical explanations of trade and financial flows, which were inappropriately used to deal with FDI), a succession of theories has been developed, like the ownership advantage theory (Hymer 1960), the product life-cycle theory (Vernon 1966), the Uppsala model—behaviour approach (Johanson and Wiedersheim-Paul 1975; Johanson and Vahlne 1977), and the OLI Paradigm (Dunning 1977, 1980), just to mention those who have been most salient for the research field up until recently. Moreover, some of these theories knew considerable adaptations and developments (see, for the Uppsala model, Forsgren and Johanson 1992; and for the OLI Paradigm, Dunning 1977, 2001, not considering outside authors). From the empirical point of view, the research on FDI has been quite extensive in the last decades, including reviews, namely with a focus on some Asian countries like China (Fetscherin et al. 2010).

The literature on FDI has focused on many factors as causes (or determinants) as well as effects. On the one hand, we have for example the multinational characteristics (Zhang and Markusen 1999), location (Becker et al. 2005), natural resources (Asiedu and Lien 2004), and institutional quality (Masron and Nor 2013), on the other hand, economic growth (Prasad et al. 2007; Ljungwall and Tingvall 2010), productivity spillovers (Barrios and Strobl 2002), technology transfer (Glass and Saggi 2002), exports (Helpman 1984), etc. On the basis of these studies, we have determined the most important factors to be considered for our sample of countries. Anyway, there are a large number of studies on FDI moving from developed to developing countries, although, more recently, flows coming from the South also became important, as shown below.

More specifically regarding FDI in poor countries, the literature shows that environmental, technological and economic factors such as low production costs for products oriented in large developed markets (Vernon 1966); resources ownership, internationalization and location (Dunning 1977, 1998); and access to large markets in the developing world (Helpman 1984) do play a major role in rooting the global production networks in the developing world (Hummels et al. 2001). Nevertheless, there are also institutional factors such as intellectual property rights protection (Antràs 2011; Bilir 2014), levels of corruption (Adams et al. 2015) and the contractual environment (Feenstra and Spencer 2005) that play a major role in FDI attractiveness. All factors have a cumulative influence on institutions (Acemoglu et al. 2005a; Nunn 2007; Levchenko 2007), on the industrial structure of countries (Acemoglu et al. 2005b; Nunn and Trefler 2014); and necessarily on

the environment and the economy, with positive and negative effects (Yalta 2013; Flora and Agrawal 2013).

Nevertheless, institutional factors are mainly relational in nature, meaning that the factors attributed to one country do not necessarily attract FDI from all countries (Stone 2016). In fact, multinationals originating from developing countries are more resilient to poor institutions (Azemar et al. 2012) and countries that cooperate and are similar to each other tend to interact (Mohlmann et al. 2010; Méon and Sekkat 2006; Levchenko 2007).

The objective of this chapter is to understand the economic and institutional factors that mould the evolution of the FDI Net Stock in South Asia. To achieve this, we first describe the evolution of the FDI Net Stock in South Asia (point 3.2); then evaluate its effects and causes showing the relation to economic growth, testing the impact of the main causal factors identified in the literature and analysing the impacts of institutional factors in the FDI Net Stock (point 3.3). In point 3.4, some concluding remarks and policy suggestions are proposed.

2 Foreign Direct Investment in South Asia: An Overview

Figures 1, 2 and 3 show the evolution of Inward and Outward Stocks of FDI by continent in US$ million dollars at constant prices of 2015. Notice that these FDI statistics report data between countries and if one wishes to use this data to analyse groups of countries, one must take that into consideration. There are also modifications of exchange rates due to FDI that influence the numbers presented in one common currency and at constant prices (Jongwanicha and Kohpaiboon 2013). Yet, some general thoughts can be proposed based on this data.

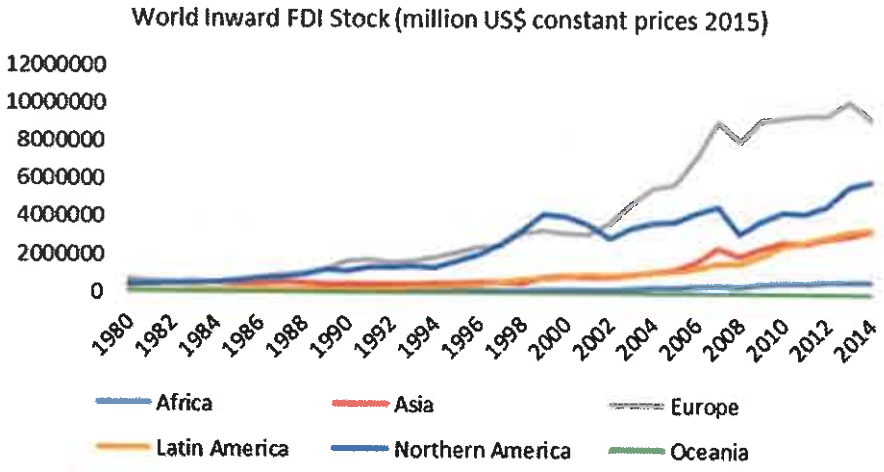

Fig. 1 Inward FDI by continent in million US$ (constant prices of 2015). Source: World Bank

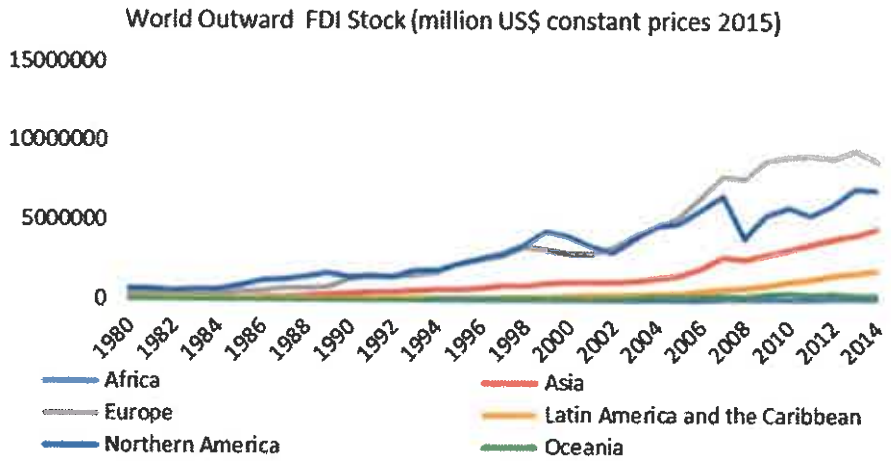

Fig. 2 Outward FDI stock by continent in million US$ (constant prices of 2015)

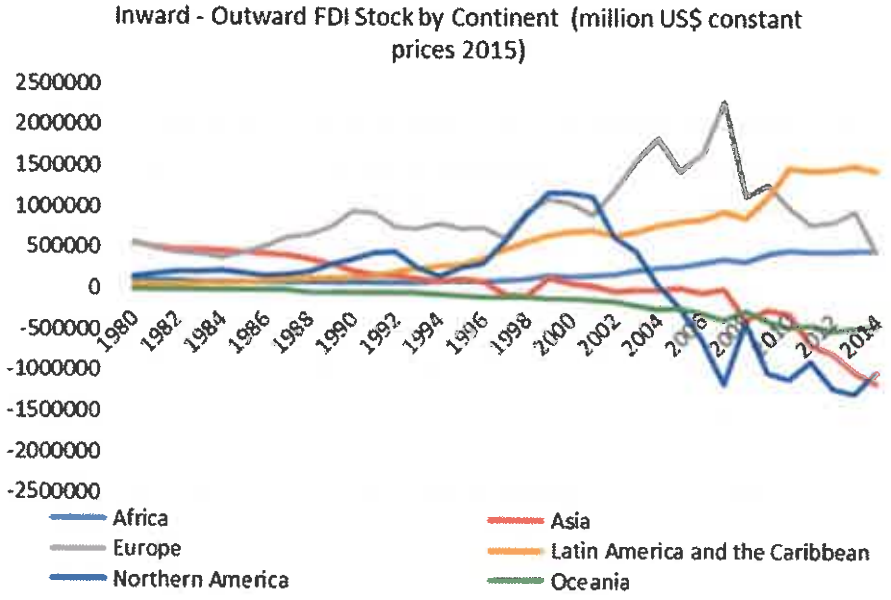

Fig. 3 Inward—outward FDI stock by continent in million US$ (constant prices of 2015). Source: World Bank

First, there is a general increase in inward and outward FDI stocks in the last four decades with temporary drops during the economic and financial crises (Radelet et al. 1998). Currently, the highest levels of FDI stocks are concentrated in Europe and North America, which were up until recently their main destination and origin. Second, although inward and outward FDI stocks tend to go along with each other

in the long term, the net stocks (the difference between inward and outward; Fig. 3) show more clearly that since the beginning of the century when the euro was introduced, emergent markets—particularly China and the other BRICS—play an increasing role in the world economy leading to a boom in international markets. Later, after the crisis of 2007–2008, Africa, Europe and Latin America become net importers of FDI while Asia, North America and Oceania became net exporters of FDI, in the net stock perspective. Thirdly, there are signs of a slowdown in FDI stocks associated with the financial and economic global crises in recent years, mainly in Europe, which has the bigger amount of FDI stocks, both inward and outward. Interestingly, Latin America is showing an increasing importance in FDI inward stocks whilst Asia is becoming an ever more prominent exporter of FDI, owning considerable stocks abroad.

Taking a closer look at the major Asian countries and regions (Figs. 4, 5 and 6) the image of the evolution of FDI stocks in this continent becomes clearer. China, and more recently India have an increasing proportion of the inward FDI stock; however, as far as the outward FDI stock is concerned, the picture looks differently, with Japan playing an outstanding role but losing ground to China after the late 1990s. Moreover, according to Fig. 6, Japan is a consistent net exporter of FDI during this period, while China became a net exporter of FDI by the turn of the century, and is becoming the big player in the field. This last aspect is clearly linked to huge surpluses in the balance of payments of the two countries as well as to their high saving rates. Interestingly, India and the other South Asian countries have a relatively reduced role in FDI stocks in Asia, while Western Asia, (including countries in the Persian Gulf) shows an increased inward FDI stock and also net inward FDI stock. This is clearly a consequence of the endowments of these countries in natural resources, particularly energy; with high oil prices since the beginning of this century up to 2013, the region became very attractive for foreign capital, notably under the form of FDI.

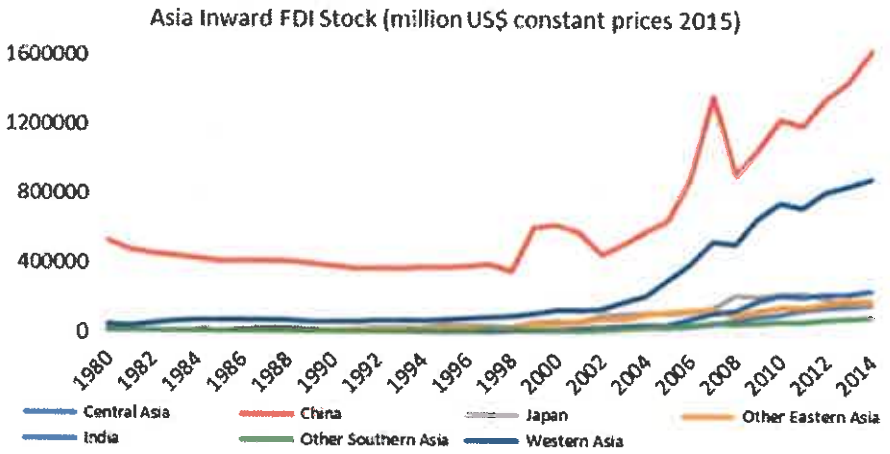

Fig. 4 Inward FDI in Asia in million US$ (constant prices of 2015). Source: World Bank

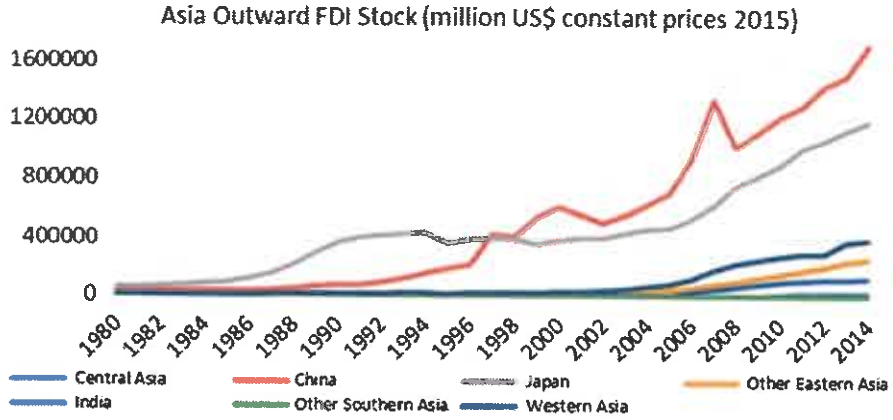

Fig. 5 Outward FDI in Asia in million US$ (constant prices of 2015). Source: World Bank

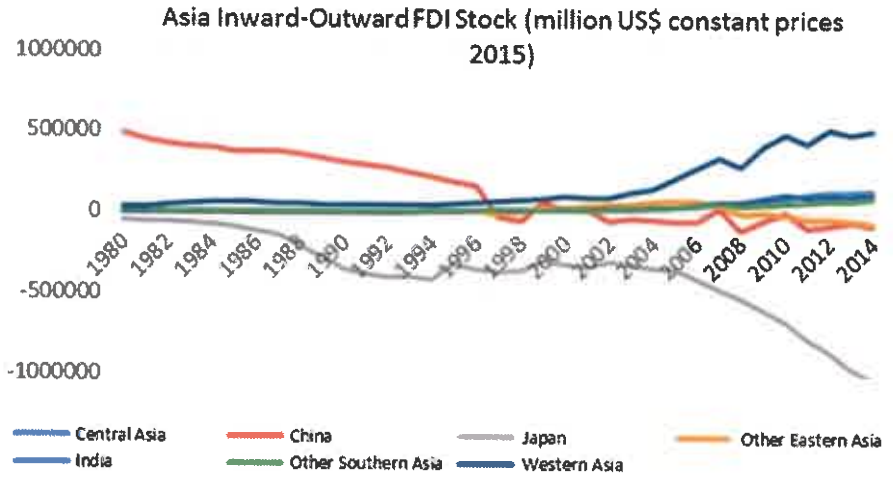

Fig. 6 Inward—outward FDI in Asia in million US$ (constant prices of 2015). Source: World Bank

Focusing on South Asia in 'per capita' terms (Figs. 7, 8 and 9), it is possible to understand the temporal and spatial profile of FDI in the region. At this scale the profiles tend to not only be related to the economic evolution of the major economic blocks, but also to the political evolution of each one of the countries. Regarding major inward FDI stocks per capita, the position of Iran and Sri Lanka are unique in the region, in India the ratio has increased but is still low in comparison with these two countries. Yet, as far as Iran is concerned, it also had a major inward FDI stock at the beginning of the eighties, however, its relation to GDP per capita has slowly been depreciated until the end of the century when major diplomatic changes allowed its recovery, a few years later, the growth of outward FDI stock from

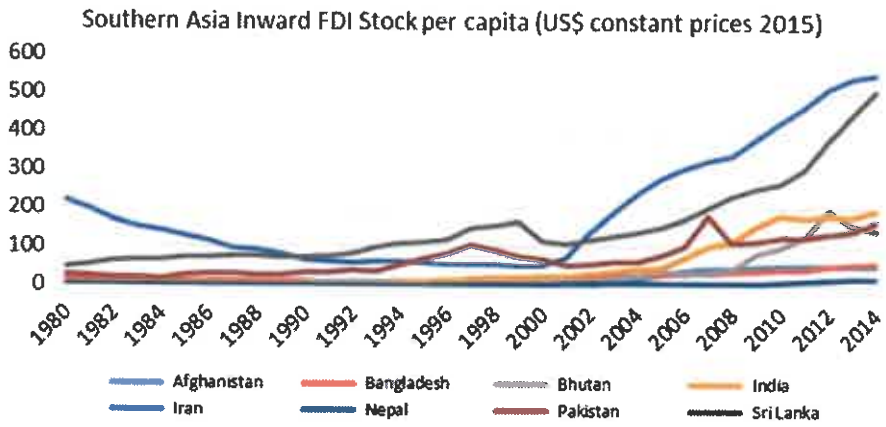

Fig. 7 Southern Asia inward FDI per capita US$ (constant prices of 2015). Source: World Bank

Iran has increased too. The process is similar in all the other countries of the region although with different intensities and varying temporal profiles. For India there is some interesting growth of inward and outward FDI only after 2005. In Sri Lanka, the process is smoother but for the other countries in the region there is almost no outward FDI. The difference between inward FDI stock per capita and the corresponding outward FDI, is not very distinct (Figs. 7 and 9).

The main questions are to know what the effects of theses flows in economic development are on the region? And secondly, what economic and institutional causes influence investment flows among South Asian countries?

3 Effects and Causes of FDI in South Asia

After a brief description of the role of FDI in South Asian countries, it is necessary to raise some questions on the subject. As referred to above, there are few studies who analyse the region in this manner. For a long time, South Asia was known for its economic isolation and political and religious conflicts, either internal (Sri Lanka), foreign intervention (Afghanistan) or war between countries, the most obvious example of this are the border conflicts between India versus Pakistan in the wake of their independence. In such conditions, to attract FDI was certainly not a priority for policy makers nor were foreign investors interested in the region, in spite of its abundant natural resources and labour. In the initial stage of its independence, the policy of India toward FDI was particularly unfriendly (von Mises 1979). However, this negative environment gradually began to shift. In the early nineties, after more than four decades of isolationism, the biggest South Asian country, India, initiated a policy of growth and openness (Bhagwati 1993), that—while it has known its ups and downs—continues till this day. Other countries, even

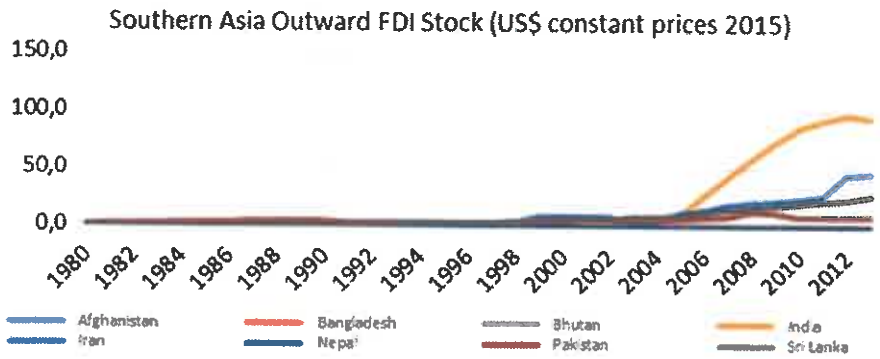

Fig. 8 Southern Asia outward FDI per capita US$ (constant prices of 2015). Source: World Bank

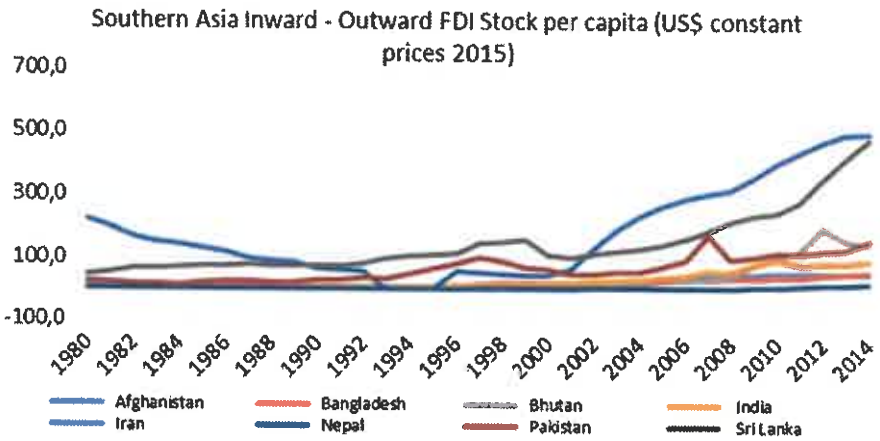

Fig. 9 Southern Asia inward—outward FDI per capita (US$ constant prices of 2015). Source: World Bank

if slowly, followed the same path. While we were unable to consider all of them in our sampling, Myanmar is the best example of a policy of openness in recent years.

As South Asia is considered a poor region with a low GDP per capita, FDI may play an important role in its economic rise insofar domestic savings are not enough. Some neighbouring countries like Malaysia have understood this, and have successfully used FDI to positively affect growth. During the period 1960–2003, FDI amounted by almost one fifth of the total investment (Ang 2009). As South Asian countries become more open and recognise the positive role that their economic ties with the outside world may have on their development process, it is necessary to generate a credible framework to sustain such a policy. It is vital that any regional policy of this kind is well managed. As the Chinese case shows, one of the most important aspects of sustainable economic growth is transfer of technology (TOT).

Notwithstanding this, the signs provided by the quocient between the FDI inward-outward indice with the base of 1990 and the GDP indice with the base of 1990 does not show a great effect of FDI on the economic performance of the South Asia countries. In fact, only in the early 1990s there are indications that FDI played an important impact on growth in Afghanistan and in Maldives. It seems that, at least in South Asia, FDI flows follow growth rather than pushing it.

Regarding causes of FDI in South Asia, the analysis we propose to explain the Net FDI stock per country seeks to find variables that can be related to the literature such as the Demographic Potential [Dpi = Σj (Pj.exp.(−β dij)) and the Economic Potential [Dpi = Σj (Yj.exp.(−α dij)) that include Pj = Population in country j; Yj = Product in country j; dij = distance between country i and country j; and attrition parameters α and β. Besides those two sets of variables, there are also time, country and time/country dummies to perceive the impacts of institutional changes.

Table 1 presents the justification of the variables proposed for the explanatory model of FDI in South Asia. The Demographic Potential can explain the importance of large and developed markets as well as the role of location and internalization, it is expected to have a positive impact on the FDI net stock per country. The Economic Potential represent the location, size, structure and development of the economies but can have a positive and negative effect of FDI net stock per country since a country with a greater economy can also export FDI. Institutional factors are explained by Country and Country/Time Dummy variables. For the purpose of this analysis, we did not find data for intercountry relations and some of these effects are explained by the Country (Di) and Country/Time (Dti) and time (Dt) Dummy institutional variables.

Table 1 Model explanatory variables of net FDI stock per country

	Demographic potential (DPi)	Economic potential (EPi)	Time dummies (Dt)	Country dummies (Di)	Time/ country dummies (Dit)
Large and developed markets (Vernon 1966; Helpman 1984)	+	+		±	±
Internationalization and location (Dunning 1977, 1998)	+	±	±		
The industrial structure (Acemoglu et al. 2005b; Nunn and Trefler 2014)		±			
Institution factors (Feenstra and Spencer 2005; Antràs 2011; Bilir 2014; Adams et al. 2015)				±	±
Intercountry institutional relations (Stone 2016; Azemar et al. 2012; Mohlmann et al. 2010)				±	±

The Model Expression explains the Net FDI Stock per country by the exponential form:

$$\begin{aligned}\text{NetFDIStock(it)} = {} & \text{EXP[B0} + \text{B1.DP(it)} + \text{B2.EC(it)}] \\ & + \Sigma t\ \text{EXP[B3t.(Dt)}] \\ & + \Sigma it\ \text{EXP[B4it (Dti)}] \\ & + \Sigma it\ \text{EXP[B5i.(Di)}] + \text{eit},\end{aligned}$$

where B0, B1; B2; B3ts; B4(it) AND B5i are the estimated coefficients of the variables presented above. Physical distances between South Asian countries and the world where considered by a direct connection between capitals. Net FDI Stocks, Product and Population where obtained in the World Bank Data Base that have these data since 1990 until 2014. The parameters β and α of the Demographic and Economic Potential where simulated for the values (0,1,2 and 3) to obtain different variable distributions but the ones that showed better estimates for the Net FDI Stock Model where $\beta = 3$ and $\alpha = 2$.

Model results are presented in Table 2 and in Fig. 10. Interestingly, the Demographic Potential with a higher attrition factor ($\beta = 3$) has a positive effect, but the Economic Potential with a lower attrition factor ($\alpha = 2$) has a negative effect. This confirms what is proposed in the literature, that the industrial structure associated with the economic potential can have positive and negative effects on the attraction of FDI. On the other hand, the implicit spatial interaction of the indicators of Demographic and Economic Potential reveals that FDI is very munch influenced by the spatial structure. Finally, the difference in attrition parameters indicate, as expected, that population is more rooted than goods and services. It is also remarkable that two small countries for which only Country Dummies were used have a completely different capability to attract FDI: The Maldives receives high levels of FDI linked to tourism, whereas the more closed off Bhutan receives much less.

Looking at the evolution of the fixed effects in Fig. 10, that also balance the relative dimension of the Economic and Demographic potentials, it seems interesting to make a few remarks. First, the fixed effect for time is always increasing, which reveals the general growth of the Net FDI Stock in the region as being an explicit—if relatively modest—sign of the integration of South Asia in the world economy. Second, whereas the fixed effect for India is in some way increasing and reinforcing the general trend, the fixed factors of other countries grow in the late 1990s but decrease after that; since the economic and demographic factors are included in the economic and demographic potential and also in the time fixed

Table 2 Model of net FDI stock per country of South Asia

	$AdjR^2$	0.976	F	53.39
	B	Std. Error	t	p
(Constant)	8.716	0.290	30.040	0.000
Bhutan	−3.331	0.168	−19.771	0.000
Maldives	3.417	0.118	28.975	0.000
D3	9.875E-06	0.000	6.462	0.000
E2	−1.348E-06	0.000	−4.438	0.000
Dummies	Fig. 10			

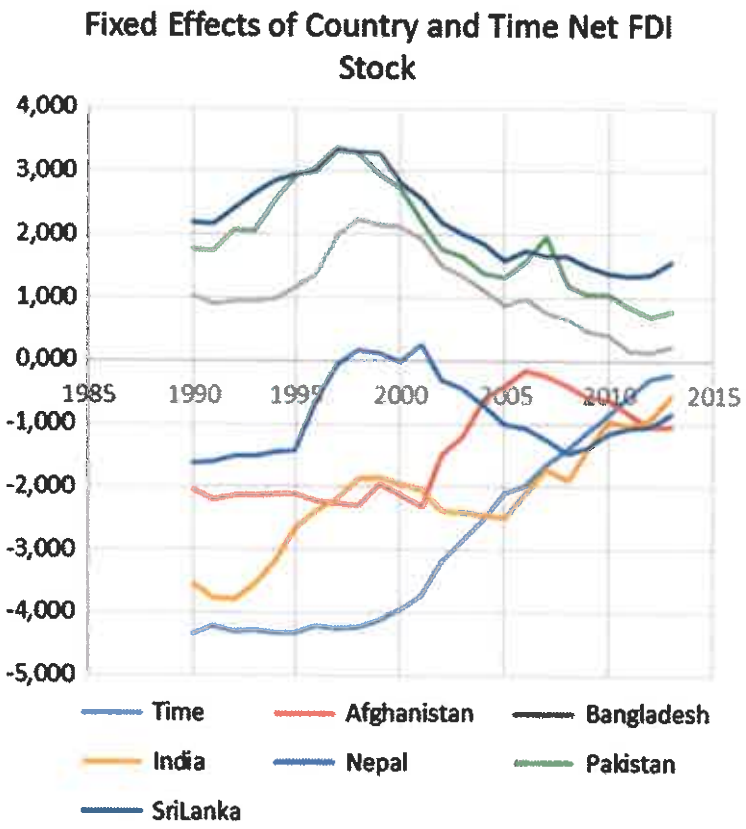

Fig. 10 Fixed effects of the net FDI stock for time and country/time

effect what might be the cause, possibly an institutional cause, that might affect the attraction of FDI to the various countries of the region?

To answer that question a few institutional qualitative variables were analysed but the absolute change in refugees (moving average of 3 years) is the one that is more revealing. There are three situations: (i) In the first one FDI coincides with conflict, that is the case of Afghanistan where there is a close relationship between the number of refugees after 2002 and the Country Time Fixed Effect of the Net FDI Stock; (ii) In a second situation the FDI coincides with peace and that is clearly the case of Bangladesh, Nepal and to some extent Pakistan; (iii) Finally there is no clear relation between peace and FDI, or there is FDI for war and for Peace that counterbalances the effects, this seems to be the case in India and Sri Lanka. The evidence suggests that there is an FDI that reacts to Conflict and an FDI that goes with conflict, this may be one of the reasons why the relation between FDI and growth is becoming less clear in the region (see Fig. 11). However, is undeniable that institutions play a crucial role, not only in the amount of FDI but also in its nature: with peace or with war (Fig. 12).

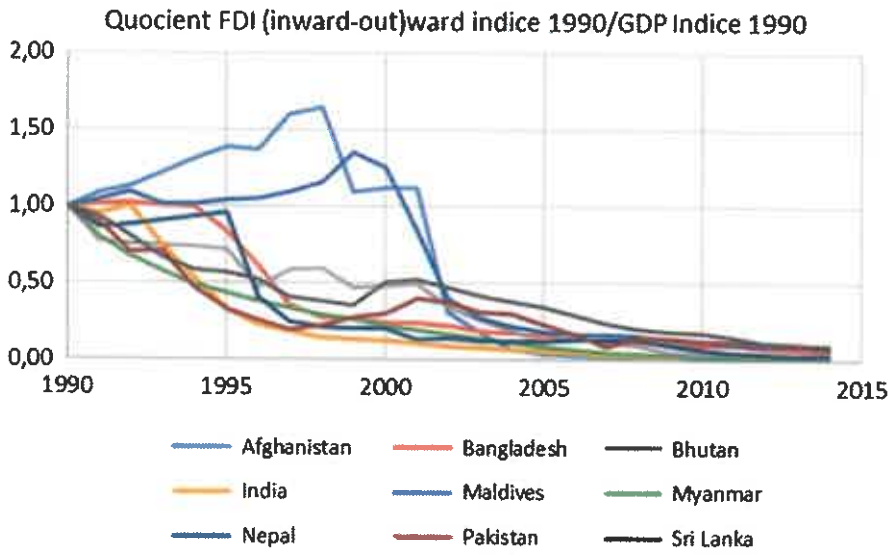

Fig. 11 Quocient FDI (inward–outward) indice 1990/GDP indice 1990

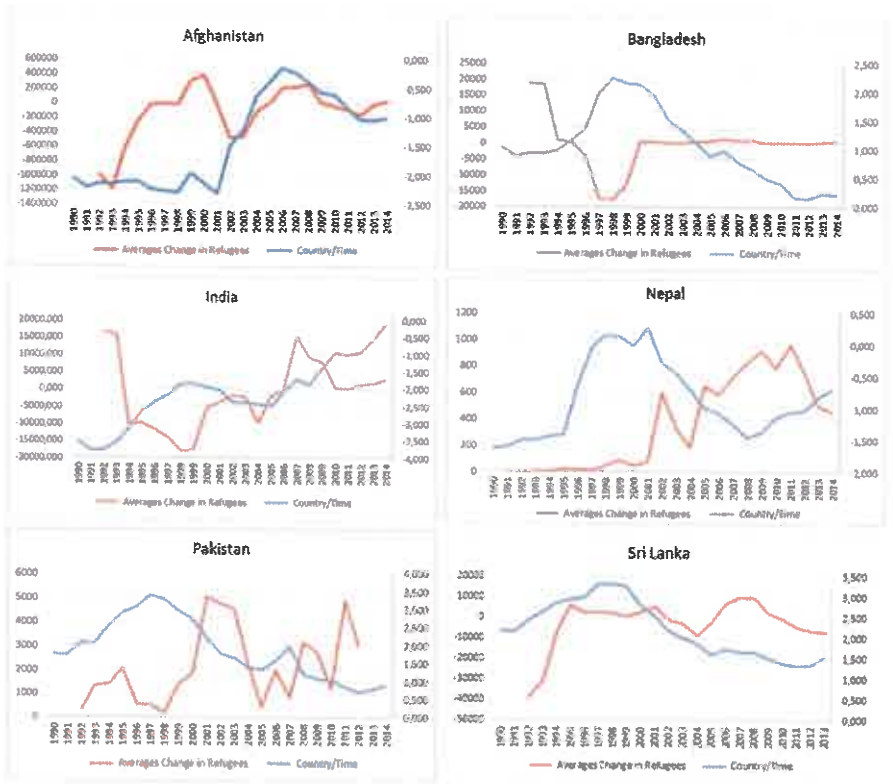

Fig. 12 Fixed effects of the net FDI stock for country/time and change in refugees

4 Concluding Remarks

The objective of the chapter is to better understand the economic and institutional factors that mould the evolution of FDI in South Asia. It is shown that FDI in South Asia is very low compared to what is seen in other parts of the world and that the effects on economic growth are limited and decreasing in the last 25 years. It is possible that this poor growth is related to the poor performance of India—which is the main economic heavyweight in the region—and/or to the conflicts that continuously occur in Afghanistan, Pakistan, Bangladesh, Sri Lanka and Nepal, impeding the development of institutional frameworks and attracting FDI either to military activities, as seems to be the case in Afghanistan, or FDI to recover from military conflicts, as appears to happen in Bangladesh, Pakistan and Nepal. Most importantly, institutions and institutional change play a major role not only in the amount of FDI but also on its nature; and it is the quality of FDI that influences economic growth, not its quantity that can be associated only with destruction and reconstruction associated with conflicts.

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