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1. Introduction

In recent years, two phenomena, along with the progress of globalization, have emerged in developing countries: the upsurge of foreign investment inflows and the increasing participation in the fragmentation of production (Amendolagine et al., 2019). Based on the report of UNCTAD in 2017, FDI in developing countries grew by 16.4 percent per year between 2001 and 2016, on average more than twice the level of investment in developed economies. Developing economies are considered to be the main beneficiaries of the global rise in foreign direct investment. For developing countries, FDI allows the transfer of technology, particularly in the form of new varieties of capital inputs, that cannot be achieved through financial investments or trade in goods and services. As such, recipients of FDI often gain employee training during the course of operating new businesses, which contributes to human capital development in the host country. Through FDI, host countries can also achieve economic growth due to the influx of capital and increased tax revenues.

Global value chains are defined as the fragmentation of production processes in several stages being performed in different countries, which are typically coordinated by multinational corporations (MNCs) (Martínez-Galán and Fontoura, 2017). By participating in global value chains, companies in developing countries have become full and qualified participants in the global market, specializing in specific stages of the production process, and exploiting their comparative advantages without developing all the capabilities covered by the entire production chain (e.g., IMF, 2013; Kowalski et al., 2015; Taglioni and Winkler, 2016). As a result of the rise of GVC involvement, combined with intensifying global competition due to the entry of major new producers and exporters, companies face significant pressures to reduce costs and increase productivity in their GVCs.

The contribution of this study towards an improved knowledge of GVCs is twofold. First, to present the results obtained with a GVC involvement index for the 21 developing Asian countries. Intensive participation in GVCs exposes local companies to the requirements of international markets, more complex demands, and learning opportunities (Amendolagine et al., 2019). In addition, upstream position in GVCs indicates specialization in the local production of intermediate inputs, which are available for foreign investors to buy (Amendolagine et al., 2019). In developing countries, downstream specialization usually corresponds to the assembly stages of imported inputs, mainly using low-cost local labor. Although it has no direct impact on the local supply of intermediate inputs, it may well attract efficiency-seeking motivations. Second, to analyze whether or not the degree of GVC involvement in a country is positively associated with FDI inflows in developing Asian countries.

The results indicate that the degree and position of GVC involvement matter for the FDI inflows. The higher degree of involvement in GVCs, the higher a country might expect the FDI inflows to be. This applies also to countries that specialize in more upstream stages of GVCs, where more raw materials and/or intermediate goods can be provided to foreign buyers, thus attracting more foreign capital. Furthermore, the relationship between GVC involvement and inward FDI is stronger in countries with stronger rule of law and better control of corruption.

The next section reviews the previous literature. Section 3 provides the theoretical framework. Section 4 presents the measurement of the GVC indicators. Section 5 describes the empirical framework, and Section 6 discusses the main results. Section 7 is the conclusion.

2. Literature review

UNCTAD (2013) estimates that around 80% of global trade, in terms of gross export, is linked to the international production networks of multinational corporations, either as intra-firm trade, or through the non-equity modes (NEMs) of international production, such as contract manufacturing, licensing and franchising, and arm's-length transactions involving at least one MNCs. As a result, the MNCs must decide where to locate their activities, taking into consideration the segments or value-added activities comprised in GVCs (UNCTAD, 2013) and the specific mode adopted by the GVCs to internationally fragment production as indicated by Martínez-Galán and Fontoura (2017). FDI has been identified as the most common way to link developing countries to GVCs (Taglioni and Winkler, 2016), because MNCs are responsible directly or indirectly for a large share of trade in value added (UNCTAD, 2013).

With globalization of firms, various forms of their cross-border activities have been facilitated. As a result, multinational corporations have been perceived in a different way, from a centralized vertical organization to a decentralized more flexible structure as discussed in Franco et al. (2008). Recent empirical literature has shown that firms which are active in a form of globalization are likely to engage in other forms of globalization as an attempt to reduce production costs and expand market (Tomiura, 2007). Among others, Antras and Chor (2003) examine the firm's choice of an organizational form, based on the property-right approach. Amendolagine et al. (2019) on the relationship between GVC involvement and local sourcing of intermediate products by foreign investors.

As documented and indicated by Dunning (1998) and Martínez-Galán and Fontoura (2017), despite the recognition that the determination of the location of multinational corporation activities is increasingly specific to GVC segments and GVC modes, the empirical research on the role of a country's degree of GVC involvement as an inward FDI driver is still scarce. Some studies have focused on the expansion of GVCs as a consequence of the inflows of FDI (e.g., Lopez Gonzalez, 2016; UNCTAD, 2013). However, Amador and Cabral (2014) point out that although it is difficult to set clear borderlines, the flows of FDI are mostly a consequence of the expansion of GVCs and not exactly drivers for its expansion. The existing evidence indicated that GVC participation increases inward FDI stock (Martínez-Galán and Fontoura, 2017). Furthermore, Amendolagine et al. (2019) report that GVC participation and upstream position encourage foreign investors to use local inputs. Carril-Caccia and Pavlova (2019) demonstrate that a country' trade policy and GVC involvement affect its capacity of attracting foreign investment.

As an attempt to make a new contribution to the literature, this paper tries to analyze the role of a country's involvement in GVCs as a driver of FDI inflows. This paper is different from the existing studies in some aspects. First, this paper focuses on Asian developing countries. Second, this research covered a sample of 21 countries. Third, this paper considers both GVC participation and position as determinants of FDI inflows.

3. Framework regarding FDI and GVC involvement

The impact of GVCs on MNCs' activities extends to all types of FDI motives (Martínez-Galán and Fontoura, 2017). For instance, when efficiency-seeking FDI comes to a firm seeking to locate discrete parts of the production in low-cost countries, it is particularly relevant to GVCs (Martínez-Galán and Fontoura, 2017). Besides, plenty of the foreign investment in natural resources is increasingly driven by MNCs that operate globally, such as Mongolia, which has demonstrated high performance in attracting FDI from different multinational corporations during the 1990s, and whose FDIs have been concentrated in the mining

industries. Even in market-seeking purposes, FDI by MNCs usually correspond to the shift from arm's-length transaction to intra-firm transaction (UNCTAD, 2013), partly due to the increased role of agglomerative space economies and local service support facilities (Dunning, 1998), and may belong to a GVC network. Strategic alliances may also prevail in a firm's decision to internationalize operations through FDI, depending on the power relationships and coordination of potential partners in its international production network (Martínez-Galán and Fontoura, 2017).

Involvement in GVCs is one of the dimensions that can affect the local sourcing decision (Taglioni and Winkler, 2016). In the early 1980s, many Southeast Asian countries implemented aggressive policies in order to attract FDI, thereby taking advantage of potential spillover effects to promote industrial development. During the process, most countries faced the problem of high domestic production costs. One of the reasons was insufficient local supply, as well as the increased cost involved in the transportation of intermediate goods.

The implications of GVC involvement are multifold, particularly for some developing countries. GVCs can provide local companies with access to global markets and integration in the global economy. They no longer have to develop an entire industry to generate exports but can instead focus on fewer tasks within industry value chains. Since participating in GVCs implies compliance with international quality standards in order to conduct customized inputs, it exposes local firms to stronger competition, more intense information flows, and greater production complexity (Amendolagine et al., 2019). This can be one of the important ways for companies in developing countries to build productive capacity, as well as technology dissemination and skill-building to create opportunities for longer-term industrial upgrading (UNCTAD, 2013). A higher productive capacity can increase incentive for foreign investors to establish manufacturing facilities in the country especially, in terms of vertical FDI, which is associated with the GVC specialization in order to benefit from the competitive advantage of each country (Beugelsdijk et al., 2009). Through vertical FDI, MNCs set production networks to fragment the value chain by taking advantage of the skilled and unskilled labor endowment differences across countries (e.g., Hanson et al., 2005; Braconier et al.,2005). In this case, the trade often takes the form of intra-company transactions, with production stages located in different countries.

Meanwhile, participation in GVCs enables countries to produce inputs for other countries by providing raw materials and/or intermediate products (Koopman et al. 2011). This participation can attract foreign investors to establish alternative local sources of supply for key intermediate inputs in order to diversify risks and to overcome trade costs like transportation, tariffs or anti-dumping measures (e.g., Buckley and Casson, 1981; Horstman and Markusen, 1987).

Furthermore, greater involvement in GVCs can improve the business ecosystem in which foreign investors decide to produce and enhance local capabilities, and an improved business ecosystem can encourage foreign investors to rely more on local inputs (Amendolagine et al., 2019).

Overall, it is possible that MNCs opt for countries with a high level of GVC involvement, as this can facilitate access to favorable factors, global market, and global economic integration.

4. Measuring the GVC involvement

This research calculates two indicators of GVC involvement based on the UNCTAD-Eora Global Value Chain Database, which provides information on key GVC indicators for 189 countries from 1990 to 2017 (Casella et al., 2019).

Koopman et al. (2011) decompose gross exports in a given economy into *domestic value added* (DVA) component and *foreign value added* (FVA). DVA, the real value added exchanged in trade, of all countries participating in GVCs contribute to its creation through their domestic factors of production; and FVA component, the value added traded as part of imported inputs in multi-stage, multi-country production processes. In value added terms, it is thus double counting rather than the creation of fresh value. The DVA further decomposes into (1) *direct value added*—that is, exports in final goods and intermediates absorbed by direct importers; (2) *indirect value added*—that is, exports in intermediates re-exported to third countries; and (3) *re-imported domestic value added*—that is, exports in intermediates that return home. These three components represent the share of domestic content in a given country's exports.

Based on the decomposition of gross exports, as described above, Koopman et al. (2011) build an index to measure the degree of GVC participation of a given country by considering both the FVA and part of DVA in gross exports, basically adding the DVA traded with the FVA traded. Since direct domestic value added and re-imported domestic value added are two GVC types that cannot be disentangled from available data, this paper aims to measure the indirect value added with regard to the DVA exports in intermediates based on previous research.

The GVC indicator measuring the participation of each year *t* in a given country *i* in the cross-national trade of intermediate goods is defined as:

$$GVC\ PARTICIPATIONit_{it} = FVA_{it} + IVA_{it} \quad (1)$$

where FVAit is the foreign value added and IVAit is the indirect domestic value added in country *i*, divided by gross exports.

Calculating the log-difference between the DVA and the FVA components of the GVC participation index provides a proxy for the country's prevailing position (i.e., upstream or downstream) in the GVC. The second indicator measuring the relative position of county *i* in year *t* within the GVCs is defined as:

$$GVC\ POSITION_{it} = \ln(1 + IVA_{it}) - \ln(1 + FVA_{it}) \quad (2)$$

It makes sense to capture whether a country is primarily a net exporter, or a net importer, of value added, that is, to compare whether a country's exports of intermediates are used by other countries with that country's use of imports in the production process (Koopman et al., 2011).

A country with positive values of position index lies upstream in the GVC of production process which are remote from final demand. The more upstream a country is the larger its forward linkage-based production is. Conversely, if a country with negative values lies downstream in the GVC, this indicates it will use a large portion of other countries' intermediates to produce final goods for exports (Koopman et al., 2011).

5. Data and empirical analysis

The empirical analysis is based on two databases—the World Bank Database and the UNCTAD-Eora Global Value Chain Database, covering 21 developing Asian countries, ranging from 1996 to 2017. The regression equation is as follows:

$$FDI_{it} = \beta_1 GVC\ PARTICIPATIONit_{it} + \beta_2\ GVC\ POSITION_{it} + \sum\beta_3\ X_{it} + \delta_i + \lambda_t + \varepsilon_{it} \quad (3)$$

The variables included in the model are as follows. The dependent variable FDI_{it} measures the FDI net inflows as the percentage of GDP of country *i* in year *t*, and *t* ranges from 1996 to 2017. As measured above, $GVC\ PARTICIPATIONit_{it}$ is the degree of GVC participation, measured by the share of value-added contents of gross exports used for further processing through cross-border production networks, and $GVC\ POSITION_{it}$ is measured by the position of one country in the GVCs.

The set of control variables X_{it} includes other factors that are considered to affect inward FDI. Control variables, including openness ratio, are measured by the total trade as the share of GDP (*OPENNESS RATIO*), which indicate the trade openness in a given country; annual percentage growth rate of GDP (*GDP GROWTH*); *GDP PER CAPITA*; labor productivity, measured as the ratio of GDP per employees (*LABOR PRODUCTIVITY*). Also, this research controls the impact of the financial crisis that emerged in 2008 using a dummy variable indicating the year *t,* ranging from 2008 to 2010 (*FINANCIAL CRISIS*).

RULE OF LAW and *CONTROL OF CORRUPTION* are the indicators of governance in a given country. Rule of Law captures perceptions of the extent to which agents have confidence in, and abide by, the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts. Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption. The estimation of both indicators gives the country's score on the aggregate indicator in units of standard normal distribution, that is, ranging from approximately -2.5 to 2.5.

It is possible that the omitted variable bias remained and other factors affecting FDI inflows in the country *i* not included in the control variables of the investigation equation. Some of these unobserved variables can be assumed to be country-specific and year-specific, representing differences between years, but constant for the country, and representing the heterogeneity between countries, but constant over time, respectively. Therefore, this paper uses the fixed effects model, controlling for other possible FDI determinant variables, including fixed effects for host country *i* (δ_i) and year *t* (λ_t) to absorb unobserved heterogeneity which could affect the degree of GVC participation and the FDI flows to host countries.

Country sample is shown in Table A1. A summary of statistics of all the variables is presented in Table A2.

6. Discussion of the main findings

The results from the fixed effects model are reported in Table 1 and show the presence of a positive and statistically significant relation between participation in GVCs and the FDI net inflows. The marginal effect retrieved from the estimated coefficient reported in Column 1 indicates that the level of GVC participation in a country such as Vietnam (0.51) improves by 1 unit, and the inward FDI increases by 15 percentage points. Existing evidence discussed by Farole and Winkler (2014) confirm that GVC involvement fosters the development of a local supply base, for instance, the agro-food buyer-driven chain in Vietnam. This is roughly in line with the finding in this paper. In addition, UNCTAD (2013) report that there is a positive relationship between FDI inward growth and GVC participation growth in 187 countries over the periods of 1990-2000 and 2001-2010. Generally, this is also consistent with the result this study.

In addition to GVC participation, the result represents that the position in GVCs is also significantly positive. Countries and industries with upstream specialization in the stages of the production process that are far from the final demand (production of intermediate goods used in exports by foreign countries) report a higher level of FDI inflows. This result might be obvious. The more upstream the industry, the more it produces intermediate goods that can be

bought by foreign investors (Amendolagine et al., 2019). Attracting foreign investors and other international buyers and linking them to the domestic economy should create conditions for local firms and workers to benefit from spillovers of knowledge and technology. Although the literature on global value chains often associates more upstream specialization with lower added value and less structural transformation, this result shows that this integration model in the value chain still provides a way to attract foreign direct investment. The study conducted by Farole and Winkler (2014) indicate that the Ahafo Linkage program in Ghana contributed to local procurement surrounding the Ahafo mine. The upstream sectors' experience, such as the agricultural industry or mining, in which the FDI and recourse to higher local sourcing of inputs by foreign companies are increasing (Amendolagine et al., 2019). The evidence from these studies is basically consistent with the finding of this research. Regarding the policy enhancing local sourcing, as documented by Sutton (2014), the local content program adopted by the Government of Tanzania, following the discovery of gas can be a good example for East and South Asian countries.[1]

The estimated coefficients of the control variables confirm the importance of a country's economic development and economic environment as mediating factors in the extent of FDI inflows. Higher levels of trade openness and better economic growth are related positively to inward FDI, consistent with the view that economic growth is positively correlated with FDI in all regions, and the correlation is slightly higher in developing countries than when all countries are combined (Iamsiraroj et al., 2015).

As such, the relation between labor productivity and FDI inflows is positive, although it contradicts some previous findings (Winkler, 2013). Conversely, GDP per capita is associated negatively with FDI net inflows. GDP per capita, as a good measurement of a country's living standards, also indicates the national wage level. The results for GDP per capita and productivity are in line with Cushman (1987) who indicates that a rise in a host country's wages or cut in its labor productivity discourages FDI into that country. The importance of the labor productivity for FDI inflows is due to the fact that foreign firms operating in developing countries usually produce more complex goods than domestic firms. Therefore, labor quality is an important factor for their investment decision (Rodriguez-Clare, 1996).

Finally, despite the control of corruption variables to be positive, both governance indicators are insignificant, which suggests that political governance in the host country does not much affect a firm's globalization decisions.

To investigate how heterogeneity in host country conditions might affect the impact of GVCs on FDI inflows, this paper interacts the two measurements of GVC involvement with macro variables (Table 2).

First, this research considers the measurement of rule of law (*RULE OF LAW*) as a proxy for local institutional quality and, as such, the results indicate that the effect of GVC participation is higher in countries with stronger institutions. Although the impact of rule of law itself on FDI in this research is not significant, this finding still supports the view that a good institutional environment is important for attracting foreign investors (Amendolagine et al., 2019). This is especially the case when the aim is to establish local linkages with domestic suppliers, since well-functioning institutions are essential for ensuring foreign investors are able to enforce contracts with local partners (Dollar and Kidder, 2017). Figure 1 shows the marginal effects of GVC participation by rule of law.

Second, this paper interacts the GVC indicators with control of corruption *(CONTROL OF CORRUPTION)* in a given country. The positive and significant coefficients of the interaction

[1] After discovering natural gas reserves, the Tanzanian Government established a Local Content Unit to promote the participation of domestic companies as suppliers of foreign multinational corporations investing in the country (Sutton, 2014).

term implies that good political governance reinforces the positive relationship between GVC participation and inward FDI. The marginal effects of GVC participation by control of corruption are shown in Figure 2.

Table 1. Result of a fixed effect s panel regression to estimate the determinants of FDI inward with the country's GVC involvement index in the period 1997-2017

Dep. Variable:	FDI net inflows	FDI net inflows
	(1)	(2)
GVC Participation	0.17*	0.17*
	(0.10)	(0.10)
GVC Position	0.19**	0.19**
	(0.09)	(0.09)
Openness Ratio	0.10***	0.10***
	(0.02)	(0.02)
GDP Growth	0.34***	0.34***
	(0.08)	(0.08)
GDP Per Capita	-0.00**	-0.00*
	(0.00)	(0.00)
Labor Productivity	0.00*	0.00
	(0.00)	(0.00)
Rule of Law	-0.49	-1.00
	(1.34)	(1.58)
Financial Crisis	-2.11	-2.11
	(1.50)	(1.50)
Control of Corruption		0.83
		(1.37)
Constant	-12.40***	-12.24***
	(4.60)	(4.61)
Year Fixed Effects	Yes	Yes
Country Fixed Effect	Yes	Yes
Observations	399	399
Number of Countries	21	21

Notes: Column 1 reports the estimate coefficients of equation (3), obtained with fixed effects panel model. The dependent variable is the percentage of FDI net inflows divided by GDP. Column (2) reports the coefficients of the same model but with new independent variables, CONTROL OF CORRUPTION. Standard errors are reported in parentheses * p<0.1, ** p<0.05, *** p<0.01.

Table 2. Result of the interaction between dependent variables.

Dep. Variable:	FDI net inflows (1)	FDI net inflows (2)
GVC Participation	0.28**	0.32***
	(0.11)	(0.12)
GVC Position	0.27***	0.26**
	(0.10)	(0.10)
Openness Ratio	0.10***	0.10***
	(0.02)	(0.02)
GDP Growth	0.35***	0.35***
	(0.08)	(0.08)
GDP Per Capita	-0.00**	-0.00**
	(0.00)	(0.00)
Labor Productivity	0.00*	0.00
	(0.00)	(0.00)
Rule of Law	-10.21**	-1.00
	(4.41)	(1.58)
Control of Corruption	0.17	-9.62**
	(1.46)	(4.63)
Financial Crisis	-2.27	-2.31
	(1.55)	(1.55)
GVC Participation x Rule of Law	0.21**	
	(0.09)	
GVC Position x Rule of Law	0.05	
	(0.07)	
GVC Participation x Control of Corruption		0.21**
		(0.09)
GVC Position x Control of Corruption		0.04
		(0.07)
Constant	-17.92***	-20.04***
	(5.32)	(5.77)
Year Fixed Effects	Yes	Yes
Country Fixed Effect	Yes	Yes
Observations	399	399
Number of Countries	21	21

Notes: Column 1 reports the estimate coefficients of equation (3), obtained with fixed effects panel model. The dependent variable is the percentage of FDI net inflows divided by GDP. Standard errors are reported in parentheses * p<0.1, ** p<0.05, *** p<0.01.

Figure 1. Average marginal effects of GVC participation by rule of law

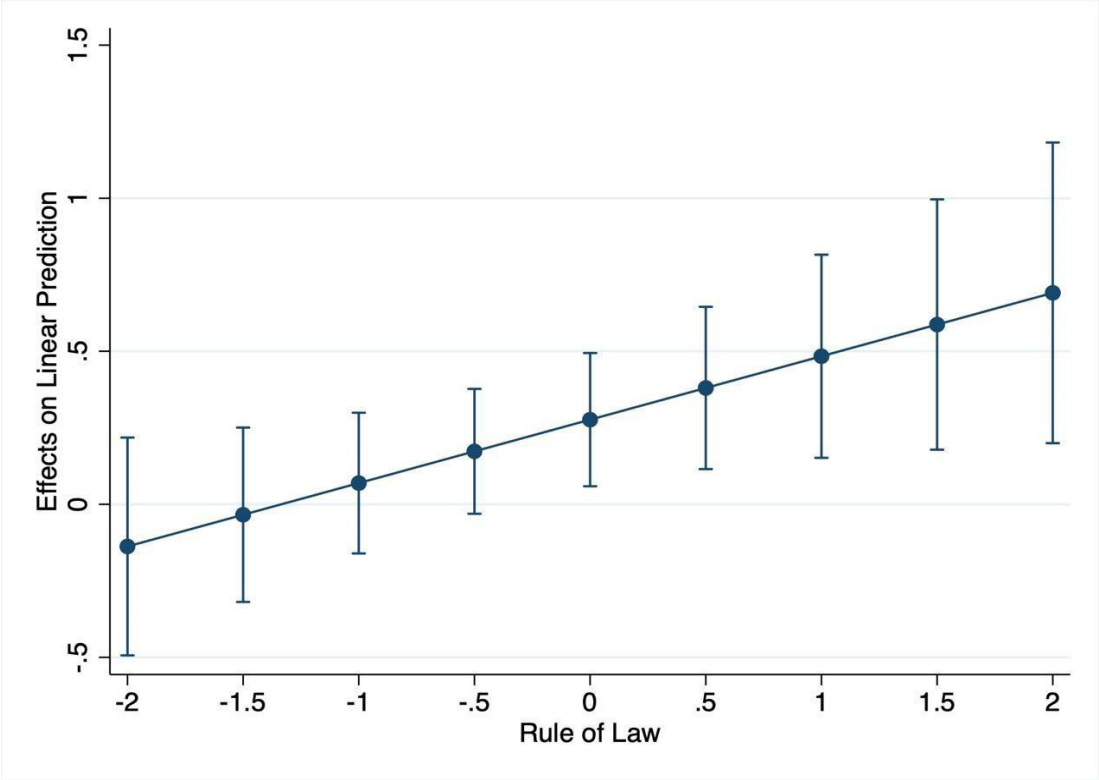
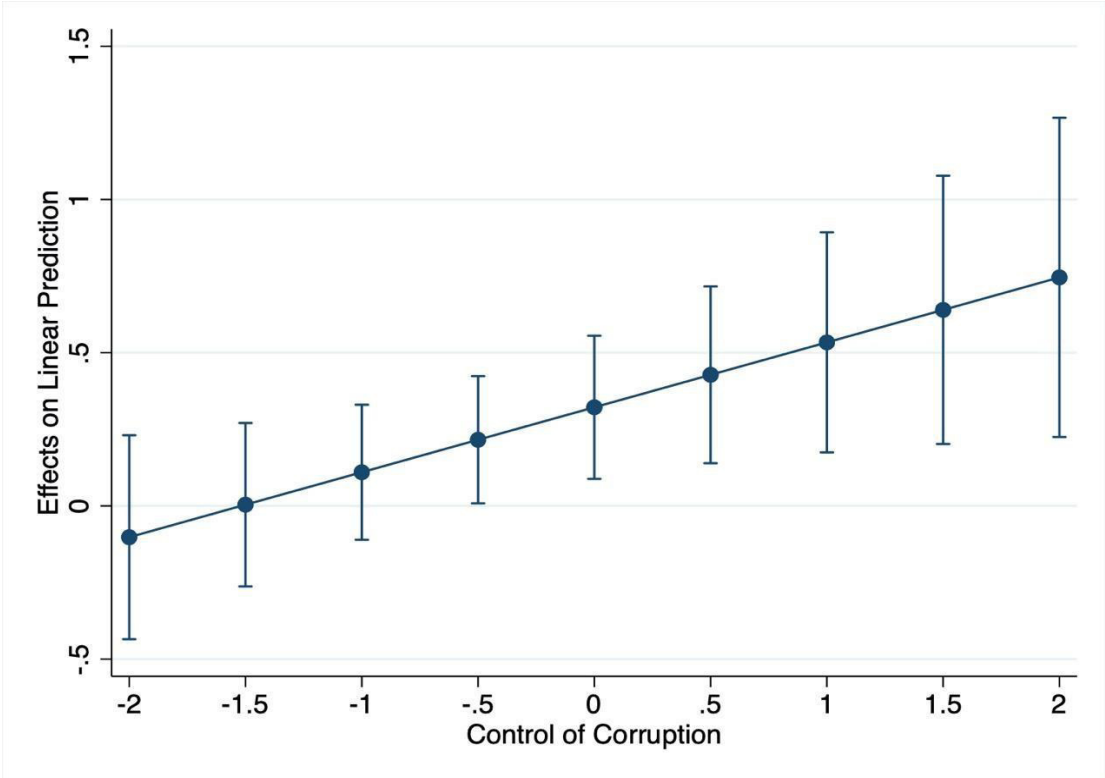


Figure 2. Average marginal effects of GVC participation by control of corruption



Source: Author's elaboration based on the UNCTAD-Eora GVC and World Bank Database

7. Conclusions

The increasing involvement of developing countries in GVCs could have positive effects on local economies by increasing FDI inflows. This research tests this hypothesis by using data on the FDI net inflows of 21 developing Asian countries from the World Bank Database, with data on GVC indicators from UNCTAD-Eora Global Value Chain Database and calculates two GVC involvement indexes at the country level.

The results show that countries with greater participation in GVCs are those which generally report higher inward FDI. It also finds that the position in the GVCs matters; countries that lie in the more upstream stages of production attract foreign investors with a greater willingness to invest at the local level. These results are especially relevant for countries that specialize in the low value-added phases that are positioned more upstream in the GVCs (Amendolagine et al., 2019). The findings in this paper support the policy efforts in some Southeast Asian countries aimed at attracting foreign direct investment by accelerating industrialization processes to lower the cost of local sourcing. This applies, for instance, to Thailand, the Philippines, and Indonesia, all of which are investing in export processing zones in order to be able to satisfy the demand from investors in global integrated industries. Besides, in order to attract more foreign investors, countries can expand GVC participation by strengthening existing links in the GVCs, enhancing the absorptive capacity of a country to benefit from GVC integration, and building a world-class workforce (Taglioni and Winkler, 2016).

In addition, it is important for countries to improve the business ecosystem beyond the initial GVC enclave and ensure that GVCs are integrated into the domestic economy. Economic upgrading and densification are key to transforming GVC participation into sustainable development. The concept of the former is mainly to gain competitiveness in the process of higher added value and to improve domestic labor productivity and skills, while the densification of GVCs means promoting spillover effects through the participation of GVCs and involving more local companies in the supply network (Taglioni and Winkler, 2016), and thus attracting more foreign investors.

The relation between GVC involvement and FDI inflows is mediated by the host country. The positive relation between the GVC indicators and local inward FDI is stronger in countries reporting better control of corruption and stronger rule of law.

This study contributes to the literature that emphasizes the benefits of involvement in GVCs (e.g., Taglioni and Winkler, 2016; Costantinescu et al., 2017), especially for Asian developing countries. It also proposes a channel through which the benefits derived from participation in GVCs can spread through the local economy, that is, attracting foreign investors. The results of this paper suggest a high degree of relationship between GVCs and FDI and show that policies to support engage in and the upgrading of countries in GVCs could improve the FDI inflows. The findings also have some policy implications. Well-functioning institutions and better political governance greatly increase the positive relations between GVC involvement and FDI attraction.

Several limitations remain in this research. The major strand that is underdeveloped would be to use industrial-sector data to examine GVCs, since the micro level measurement in analysis of GVCs would meaningfully inspire the impact of GVCs. For the future, authors will improve the results by analyzing the impact of GVC involvement on FDI in the industry level, while still focusing on Asian developing countries. A fruitful avenue for further research is expected.

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Appendix

Table A1: Country sample

East Asia	South Asia	Southeast Asia	Western Asia
China	Bangladesh	Cambodia	Bahrain
Mongolia	India	Indonesia	Iran
	Nepal	Myanmar	Israel
	Pakistan	Philippines	Jordan
	Sri Lanka	Thailand	Kuwait
		Viet Nam	Oman
			Saudi Arabia
			Turkey

Note: Country classification based on website of Central INTELLIGENCE AGENCY/ the world factbook

Table A2: variable description, source, and summary statistics

Variables	Definition	Source	Mean	Min	Max	Number of Obs.
FDI	FDI net inflows as the percentage of GDP	World Bank	3.03	-37.15	43.91	462
GVC PARTICIPATION	GVC participation index (Koopman et al.2011)	UNCTAD-Eora	45.93	23.18	66.64	462
GVC POSITION	GVC position index (Koopman et al.2011)	UNCTAD-Eora	9.14	-26.13	45.66	462
OPENNESS RATIO	Total trade as the share of GDP	World Bank	65.02	18.01	190.29	462
GDP GROWTH	Annual percentage growth rate of GDP	World Bank	5.18	-13.13	17.32	462
GDP PER CAPITA	Gross domestic product divided by midyear population	World Bank	6725.84	131.8	55572	462
LABOR PRODUCTIVITY	The ratio of GDP per employees	World Bank	15068.83	271.11	104628.4	462
RULE OF LAW	Rule of Law Index (it ranges from -2.5 to 2.5)	World Governance Indicators	-.23	-1.74	1.28	399
CONTROL OF CORRUPTION	Control of Corruption Index (it ranges from -2.5 to 2.5)	World Governance Indicators	-.36	-1.67	1.35	399
FINANCILA CRISIS	Dummy equal to one if the year ranges from 2008 to 2010, and zero otherwise	—	.16	0	1	399