SMALLNESS OF THE ECONOMY AS A (DIS) ADVANTAGE

The Evidence from Selected Interdependent Macroeconomic Data

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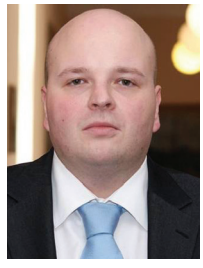

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Abstract: Small economies are usually classified by the size of their GDP. Among the small states, which can be determined by various criteria, there are many small economies. Smallness of the economy influences the vulnerability of the state, and if it is connected with the other potentially negative factors (land-locked or island position) or reliance on a few export products, it can create vulnerable economies. Concurrently, smallness of the economy can be an advantage, since it provides better conditions for faster economic growth and makes transformations of the economy easier. This article brings a quantitative comparative study of the small economies, classified by the size of their total GDP. Sets of macroeconomic data (foreign direct investment [FDI] net inflows in current US$ and GDP in current US$; external debt and GDP) were studied, for which the correlation between the FDI and GDP was calculated (for 40 smallest economies), as was the regression analysis between the FDI net inflows (independent variable) and the gross fixed capital formation (GFCF), as well as between the FDI net inflows and the growth of external debt for the 10 smallest economies between 1981 and 2014. The results were used to describe if there is a significant connection between FDI and external debt and if it can be mathematically modeled. All the data were taken from the web pages of the World Bank. The correlation analysis for FDI and GDP for the same years was also done. The countries that were studied had the smallest 40 economies in the world in 1981 (starting

year) and in 2014 (final year), regardless of their land area, population, and geographical position. To examine the influence of the smallness of economy, the 15 largest world economies were studied as control group.

Key words: small economies; foreign direct investment (FDI); GDP; external debt; vulnerability

Introduction

Considering the ambiguity of the criteria for defining small states and small economies, it was not easy to draw the line between the economies that were included in this research and those that were not. Therefore, we decided to divide the small economies into small economies of the sovereign states, at the same time being fully aware that this sovereignty in most cases is a pure formality when it comes to the smallest economies of the world. Nevertheless, we were not opposed to van der Pijl's (2014, 31) thesis about sovereignty as a fiction and a "system of nation-states" that keeps this fiction alive and small economies of various types of dependencies and states that were associated with other states. Therefore, the distinction between national economies (economies of nation-states) and economies (of dependencies) was used. However, every classification, besides its strong sides, has its weak sides.

It seems that at least some of the tiny polities have even surpassed the old, well-established Western economies in terms of all major economic indicators per capita—a development that certainly comes as a surprise to the proponents of various theories asserting that globalization primarily benefits old capitalist centers (e.g., Simpson 1990, quoted in Dumienski 2014, 7).

A significant number of authors who study/have studied small states included GDP in their criteria for defining small states—the use of GDP as a variable also means that these classifications can be considered as classifications of small economies, since this is an economic indicator. All of these classifications obviously are from the group of quantitative criteria for defining small states.

The correctness of linking the quantitative, economic indicator such as GDP with relational approach in defining small states and their specific characteristics is emphasized by Panke (2012, 316), who points out GDP and their administrative capacities as criteria for the definition of small states:

> A small state can be defined as a state with less than average financial resources in a particular negotiation setting. A proxy for available financial means is GDP. The higher the value of goods and services produced within a particular country in a given year, the greater the tax income and the greater the state budget that

> it can use to staff ministries and negotiation delegations and to provide them with administrative support and expertise. (Panke 2012, 316)

Armstrong and Read (2002) suggest that smaller states often outperform larger ones in economic terms, possibly due to the better quality of political and economic institutions (Congdon Fors 2007).

Small island economies may be unable to exploit technological improvements in transportation and they are generally marginalized from key transport routes (Briguglio 1995). Nevertheless, Easterly and Kraay (2000) claim that smaller countries tend to have higher GDP per capita and growth rates, which was confirmed by Brito (2015).

Some Specific Advantages and Problems of Small Economies: Resilience and Vulnerability Revisited

Small economies, especially small island developing economies and economies of small land-locked states, mostly suffer from specific vulnerabilities. Nevertheless, some of them have shown remarkable resilience and managed to turn the "twist of fate" that their geographical handicap has made for them.

By analyzing the case of Iceland and emphasizing Katzenstein, Thorhallsson (2010, 376) concluded that Katzenstein's model has value:

> The key to success is flexible domestic adaptability. Democratic corporatism, enhanced by an extensive domestic consensus, creates conditions for these achievements and "builds strong political links between the proponents of efficiency and those of equality: indeed, the corporatist formula for success is to restrain the unilateral exercise of power." (Katzenstein 1984, 257)

Nevertheless, the case of Iceland shows that not all European small states are the same. Small states do have a choice as to how they respond to the liberalization of the international economy and to European integration (Katzenstein 1997), despite their greater vulnerability compared with larger states when faced with international economic and political pressure.

However, the states that Katzenstein (1985) has studied were not (then) and are not (now) among the world's smallest economies. These states are neither vulnerable nor isolated or distant, and do not depend on just a couple of export products. Therefore, it is always important to draw a distinction between small states and small economies, and especially the small economies of small island states.

The ever-deeper integration of small states in the European Union (EU) as well as the EU's enlargement to numerous small states has attracted renewed attention to the small-state issue. Ólafsson (1998) argues—with a view to Iceland—that small states might not necessarily obtain larger economic gains from European integration than from free trade on the world market and that influence may only be increased if each member enjoys equal rights regardless of size (Neumann and Gstöhl 2004, 11).

The small size of the market may lead to less diversification of raw materials and resources, which restricts domestic production (Castello and Ozawa 1999). The same authors consider small states more open to changes, experiencing greater political integration and better prepared to face uncertainties and external shocks, due to the prevalence of greater solidarity and social cohesion.

These characteristics imply that small states have strong geographic concentration of exports and limited diversification of production and exports, which increase the exposure to external shocks. The small domestic market leads the country to a high level of openness to external trade, which also increases exposure to external shock (Brito 2015, 3).

Guillaumont (2010) considers the vulnerability of a country resulting from three components: the size and frequency of exogenous shocks (observed or anticipated), exposure to shocks, and the ability to respond to shocks.

Because most of the smallest economies in the world are island states, a special attention was devoted to the implications of islandness, which are explained here. In recent years, the literature on small island (developing) states (economies) (SIDS) has expanded. A book of papers, edited by Briguglio and Kisanga (2004), problematized the principles of economic vulnerability and resilience of SIDS. The contributors point out that good governance and appropriate macroeconomic policies can, to an extent, mitigate the drawbacks of economic vulnerability.

Nevertheless, SIDS have often been depicted as powerless, dependent, and sometimes failed, states (McGillivray, Naudé, and Santos-Paulino 2010), and these judgments were quantified on the vulnerability index (Baldacchino 2000; Briguglio 1995). In this "strident 'deficit' discourse" (Baldacchino 2012, 238), SIDS were seen as states with special needs, requiring external help to survive. However, a contrasting characterization to the discourse of vulnerability of SIDS has more recently emerged. This discourse of resilience focuses on the resourcefulness of SIDS to cope with the above challenges (Armstrong and Read 2006). Guillaumont (2010) stated that only 15% of SIDS were low-income economies (quoted in Philpot, Gray, and Stead 2015, 33).

Indeed, Armstrong and Read (2000, 288–89) asserted, "'Islandness' has virtually no impact on the economic performance of microstates . . . and the early pessimistic tone of much of the research literature has now receded."

Greig, Turner, and D'Arcy (2011, 161), studying the case of Mauritius as a small island developing state, pointed, "Mauritius is often offered as a 'success story' or 'economic miracle.' The factors contributing to this are 'good governance,' usually defined in terms of 'openness' and 'transparency.'" However, the aforementioned authors also accentuated internal social governance and the ability to scan the global economic environment as contributing to Mauritius' success: "The narrow emphasis often placed on Mauritius' 'good leadership' and 'good governance' needs to be contextualized by appreciating the social-democratic ideology of successive governments and the management of multiculturalism."

Philpot, Gray, and Stead (2015), who studied Seychelles as a SIDS, did another study of a particular SIDS. They analyzed perceptions of residents of the Seychelles in the western Indian Ocean in relation to a long-running debate over SIDS as to whether they are vulnerable or resilient. The results of data obtained showed that respondents perceived their country to be both vulnerable and resilient.

The concept of peripherality is usually mentioned in the context of SIDS. It is a relational concept, emphasizing physical distance and isolation. Campling (2006, 236) emphasizes "permanent physical isolation" as a key variable common to SIDS.

Small Pacific island states are generally in a much worse position than small island states of the Caribbean, especially if they are comprised of small low-lying island and therefore prone to flooding and tropical storms, as well as inundation.

Generally, economic issues were relatively more important to small states, and while they tend to avoid ambiguity in their foreign policy, they engage more in conflictual non-verbal behavior than large states (East 1973).

Many studies consider small states more vulnerable to natural disasters than large states, but this study indicates that, on average, large states suffer more natural disasters than small states. However, in terms of the effect of environmental vulnerability on growth rate of GDP per capita, there is no difference between small countries and large countries. The quantitative analysis, done by Brito (2015), offers us empirical evidence about the differences between small and large states in vulnerability and economic growth. Brito analyzes whether the effect of environmental vulnerability on economic growth is influenced by the size of the state. It was found that productivity is the main channel of transmission of the effects of environmental vulnerability on the growth rate of GDP per capita in the two groups of countries.

Globalization, tourism (transborder movement of tourists), transborder capital movements, rapid transference and adoption of institutional design and policies from some countries to others—all influence small states (Bourne 2003, 2).

A good example of studying economic specificities and the ways to optimize economic output of small (island) states inside the EU is a study done by Camilleri and Falzon (2013), who have studied the productivity growth rates in Malta and

Cyprus, proposing at the same time policies as to how these island states might augment their productivity and competitiveness. They have identified three possible growth strategies for the two islands: an Innovation-Oriented Economy, a Controlled Input-Cost Economy, and an Opportunistic Growth Model. To decide which strategy might be best suited to these two states, they have conducted a comparative analysis among different EU countries in terms of productivity yardsticks, and evaluated trends in gross value added (GVA), employment levels, and unit labor costs (ULCs) in the most important economic sectors of Malta and Cyprus, the two EU states that are nevertheless (still) subject to peripherality, although they are member states of the EU.

There must also be a search for scale economies. Small states cannot ignore entirely the need for enterprises of production size sufficient for international cost competitiveness. For the Caribbean, agriculture is a cogent case. Sugar may be used as an example. In this industry, production costs in the Caribbean Community (CARICOM) producing countries exceed internationally competitive prices by a factor of 3.5 in Trinidad and Tobago, 2.5 in Jamaica, 2.4 in Barbados and St. Kitts and Nevis, and 1.3 in Guyana. Only Belize matches the internationally competitive price. Any dismantling of the EU sugar protocol would mean full exposure of CARICOM producers to a low-cost major exporter like Brazil (Bourne 2003, 12–13).

Cole (1993), writing more than a decade before accessing of these two island states into the EU, claimed their peripherality was due to their inherent size and relative distance from larger economic blocs, such as Northern and Central Europe.

Small states must find new market niches and maximize those which they already have. The strategic significance of niche products is that they are resistant to scale economies, and their competitiveness is mainly based on quality and uniqueness and are amenable to flexible production arrangements. Examples of successful niche marketing can be found in agriculture, in tourism, in international financial services, and in entertainment. It appears, however, that those successes are associated with enterprises amenable to product innovation or with start-up enterprises. However, the attempt to find a moneymaking niche independent of size can lead to disproportionate damage if the gamble fails (Bailes and Thorhallsson 2012, 34).

Laguardia Martinez (2014, 6–7) suggests the following economic negative characteristics (disadvantages) of small states: limited domestic opportunities leading to openness and susceptibility to adverse developments elsewhere; a narrow resource base leading to specialization in a few products with associated export concentration and dependence on a few markets; shortage of certain skills and high per capita costs in providing government services; greater vulnerability to natural disasters; and greater reliance on overseas aid and various preferential agreements.

Smaller island states tend to be particularly prone to exogenous shocks such as natural disasters, international political instability, and fluctuations in prices of raw materials. Despite this, the idea of vulnerability should be considered in the context of the degree to which economies manifest resilience in tackling shocks (Camilleri and Falzon 2013, 135).

Tourism, a mature industry, displays the characteristics of the economically aged, that is, outmoded products, production inflexibility, high cost-returns ratios and vulnerability to newcomers (Bourne 2003, 10–11).

One of the examples of the development of the new niches is the development of medical tourism in the Caribbean, a niche that connects tourism and health, as one of the means of tangling with the economic crisis. Connell (2013, 115–16) points out the efforts of small states, in finding the new means of economic diversification and emphasizes a new role of medical tourism. Generating modern economic activity, let alone economic growth, has proved difficult for a range of reasons stemming from limited human and physical resources, inadequate infrastructure, high energy costs and high wages but, above all, location and the lack of economies of scale.

Another form of tourism, in a certain way opposed to mass tourism, and not so lucrative, is ecotourism, which has been developing on some small islands of the Caribbean since the 1990s.

> The Bahamas, Barbados, and the Cayman Islands exemplify different strategies for medical tourism, in order to generate foreign exchange and new employment, and reduce costs from overseas referrals. Most medical tourism projects have been developed by overseas corporations and are oriented to a US market. (Connell 2013, 115)

Medical tourism expands the factors of attraction for tourists and creates a new quality, besides the traditional sun, sea, and sand tourism, as well as cruise tourism.

The example of Dominica shows how small Caribbean nations are finding different ways to cope with the significant loss in the profits from bananas in the post-preferential period. Slinger-Friedman (2009, 2–3) has analyzed the development of the ecotourism industry on the island. Dominica has a land area of 290 square miles and is a small enough island for the entire country to be studied and for any policy impacts to be more readily observable. The issue of exclusive economic zones (the EEZs) of the small states opens a couple of questions. At first, the fact that according to the UN Convention on the Law of the Sea (UNCLOS), the EEZs look like a true and undeniable benefit, especially for small island states. Some of those, especially small island states in the oceans, remote from the

continents, can proclaim the EEZs that are even hundreds of times larger in area than their own territory. However, these proclamations are worth little without the possibility of effective control. The waters in question, extending 200 nautical miles from the coastal baseline, have to be mapped, monitored, and patrolled.

Thinking more about the politico-economic arena, it has to be emphasized that small states cannot make international rules of the game. Small states do not even have a voice in some international rule-making forums within the financial world or within the UN system. Small states cannot make global policies. This too should be evident. Global policies on the environment, in money laundering, on counter-terrorism and on labor standards have reflected the interests of major countries (Bourne 2003, 8).

Due to all of the mentioned reasons, we can conclude that small states have certain advantages of being small. Concurrently, however, small states also face a great number of vulnerabilities that derive from their smallness, especially if that smallness is joined with (distant, peripheral) island position or land-locked position. In these cases, it is much harder for small states to be resilient to all the exogenous shocks that they can face.

Methodology

To do a quantitative comparative study of the small economies, the smallest economies of the world were classified by the size of their total GDP in current US$ for the years 1981 and 2014, regardless of their land area, population, and geographical position. These particular years were selected as the first and the last for which the data from the World Bank web pages were available. The sets of macroeconomic data (foreign direct investment [FDI] net inflows in current US$ and GDP at market prices in current US$) were studied (the correlation was calculated for the period 1981–2014), and the regression analysis between FDI inflows (independent variable) and percentage of external debt in GDP (dependent variable) was made for the 10 "definitely" smallest economies. The results were used to describe if there is a significant connection between FDI and GDP, as well as external debt, and if it can be mathematically modeled. To study the influence of smallness of economy, the 15 largest world economies, "perfect opposites" to small economies, regarding the main determinant of smallness of the economy (GDP), were studied as the control group.

The intention was to use the macroeconomic data from the same source, the World Bank. Hence, the methodological constraints were connected mostly with the lack of a complete data from the same source for all studies' states and dependencies, as well as parameters. The microstates of Europe, Andorra, Liechtenstein, Monaco, and San Marino, although evidently among the world's 40 smallest

economies, had to be excluded from the calculation of correlation and regression due to the lack of data. For these states, correlation could not be calculated; hence, there were no data regarding FDI for Andorra, Liechtenstein, and Monaco at all, and for San Marino, the data about GDP and FDI were unavailable or insufficient as well.

Results and Discussion

The Correlation between the FDI and the GDP

To determine whether there was significant correlation present between FDI (independent variable) and GDP (dependent variable), the authors calculated the Pearson correlation coefficient for the 40 smallest economies of the world (determined by the size of the GDP) in 1981 (base year) and 2014 (final year). The *main research hypothesis* was that a significant correlation exists between these two variables. The *null hypothesis* was also posited, stating that no significant correlation between these variables exists. The results are shown in Tables 1 and 2.

The majority of the small economies that were analyzed, especially the ones where the number of analyzed years was over 30 (due to a satisfactory availability of data), showed a significant correlation between FDI and GDP in the analyzed period. The average share of FDI in GDP, GDP per capita in 1981 and 2014, as well as GDP index are shown in Table 3, to show the difference among 40 smallest economies in these indicators, and try to establish whether specific regional patterns are present.

The influence of FDI to gross fixed capital formation (GFCF) was also calculated for smallest economies of the world. There were significant data constraints because the value of the GFCF was not available for the majority of the countries. Due to this limitation, there are no regression results for a significant number of the considered economies. To both the values of the FDI and GFCF, a log transformation was employed, meaning that the results obtained from the ordinary least squares (OLS) regression will provide the elasticity of the impact of FDI on GFCF. The dependent variable is GFCF, while the explanatory variable is FDI. The general model is as follows:

$$\text{Log GFVF} = \alpha \text{logFDI} + \varepsilon_t \quad (1)$$

Therefore, it means that the interest of this article is in calculating the value of the α coefficient and the descriptive value of the model. The summary of the results, as well as the key statistics, are presented in Table 4.

Table 1 The 40 Smallest Economies of the World in 1981: Pearson Correlation Coefficient (FDI and GDP), *p* Value, and Determination for FDI and GDP 1981–2014

No.	*National economies*	*Pearson correlation coefficient, r (FDI and GDP)*	*Years included*	*p value (at 0.05)*	*Significance*	*Determination (r^2)*
1	Kiribati	0.260	29	0.173	No	0.068
2	Marshall Islands	0.607	24	0.002	Yes	0.368
3	Equatorial Guinea	0.702	33	<0.001	Yes	0.493
4	Maldives	0.921	34	<0.001	Yes	0.848
5	St. Kitts and Nevis	0.932	33	<0.001	Yes	0.869
6	Tonga	0.454	30	0.012	Yes	0.206
7	Dominica	0.609	33	<0.001	Yes	0.371
8	St. Vincent and the Grenadines	0.875	28	<0.001	Yes	0.766
9	Grenada	0.414	33	0.017	Yes	0.171
10	Vanuatu	0.788	33	<0.001	Yes	0.621
11	Micronesia, Federated States	0.300	14	0.297	No	0.090
12	Comoros	0.762	28	<0.001	Yes	0.581
13	Samoa	0.639	32	<0.001	Yes	0.408
14	Antigua and Barbuda	0.715	33	<0.001	Yes	0.511
15	Cabo Verde	0.857	29	<0.001	Yes	0.734
16	Bhutan	0.274	22	0.217	No	0.075
17	St. Lucia	0.730	33	<0.001	Yes	0.533
18	Guinea-Bissau	0.814	29	<0.001	Yes	0.663
19	Seychelles	0.779	34	<0.001	Yes	0.607
20	Solomon Islands	0.609	33	<0.002	Yes	0.371
21	Belize	0.845	31	<0.001	Yes	0.714
22	Gambia, The	0.563	28	0.002	Yes	0.317
23	Andorra	n/a	/	/	/	/
24	Lesotho	0.425	33	0.014	Yes	0.181
25	Liechtenstein	n/a	/	/	/	/
26	Guyana	0.896	33	<0.001	Yes	0.803
27	Swaziland	0.319	33	0.070	No	0.102
28	Central African Republic	0.753	28	<0.001	Yes	0.567
29	Somalia	–0.112	10	0.758	No	0.013
30	Mauritania	0.719	33	<0.001	Yes	0.517
31	Liberia	0.677	33	<0.002	Yes	0.458
32	Chad	0.289	33	0.103	No	0.084
33	Suriname	0.095	33	0.599	No	0.009
34	Barbados	0.799	33	<0.001	Yes	0.638
35	Togo	0.550	33	<0.001	Yes	0.303
36	Burundi	0.255	29	0.182	No	0.065
37	Botswana	0.558	33	<0.001	Yes	0.311
38	Sierra Leone	0.552	33	<0.001	Yes	0.305
39	Mauritius	0.847	33	<0.001	Yes	0.717
40	Monaco	n/a	/	/	/	/
		Median value 0.719				

Sources: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries; http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries.

Notes: Where there was no available data for the year requested, a tolerance of two years was allowed. Therefore, in some cases the data for the years 1982 or 1983 were taken into account; hence, it was evident that these economies were among the world's 40 smallest economies at that time. Due to the lack of data, states like Palau, Sao Tome, and Principe, and Tuvalu, which evidently were among the smallest economies of the world in 1981, were not included in Table 1.

Table 2 The 40 Smallest Economies of the World in 2014: Pearson Correlation Coefficient (FDI and GDP), *p* Value, and Determination for FDI and GDP 1981–2014

No.	*National economies*	*Pearson correlation coefficient, r (FDI and GDP)*	*Years included*	*p value (at 0.05)*	*Significance*	*Determination (r^2)*
1	Tuvalu	0.153	9	0.694	No	0.023
2	Kiribati	0.260	29	0.173	No	0.068
3	Marshall Islands	0.607	24	0.002	Yes	0.368
4	Palau	–0.126	23	0.567	No	0.016
5	Micronesia, Federated States	0.300	14	0.297	No	0.090
6	Sao Tome and Principe	0.279	15	0.314	No	0.078
7	Tonga	0.454	30	0.012	Yes	0.206
8	Dominica	0.609	33	<0.001	Yes	0.371
9	Comoros	0.762	28	<0.001	Yes	0.581
10	St. Vincent and the Grenadines	0.875	28	<0.001	Yes	0.766
11	Samoa	0.639	32	<0.001	Yes	0.408
12	Vanuatu	0.788	33	<0.001	Yes	0.621
13	Gambia, The	0.563	28	0.002	Yes	0.317
14	St. Kitts and Nevis	0.932	33	<0.001	Yes	0.869
15	Grenada	0.414	33	0.017	Yes	0.171
16	Guinea-Bissau	0.814	29	<0.001	Yes	0.663
17	Solomon Islands	0.609	33	<0.001	Yes	0.371
18	Antigua and Barbuda	0.715	33	<0.001	Yes	0.511
19	St. Lucia	0.730	33	<0.001	Yes	0.533
20	Seychelles	0.779	34	<0.001	Yes	0.607
21	Timor-Leste	0.674	11	0.023	Yes	0.454
22	Djibouti	0.757	23	<0.001	Yes	0.573
23	Belize	0.845	31	<0.001	Yes	0.714
24	Central African Republic	0.753	28	<0.001	Yes	0.567
25	Bhutan	0.274	22	0.217	No	0.075
26	Cabo Verde	0.857	29	<0.001	Yes	0.734
27	Liberia	0.677	33	<0.001	Yes	0.458
28	Lesotho	0.425	33	0.014	Yes	0.181
29	Maldives	0.921	34	<0.001	Yes	0.848
30	Burundi	0.255	29	0.182	No	0.065
31	Guyana	0.896	33	<0.001	Yes	0.803
32	Andorra	n/a	/	/	/	/
33	Swaziland	0.319	33	0.070	No	0.102
34	Eritrea	0.070	18	0.783	No	0.005
35	Fiji	0.822	28	<0.001	Yes	0.676
36	Malawi	0.720	33	<0.001	Yes	0.518
37	Barbados	0.799	33	<0.001	Yes	0.638
38	Togo	0.550	33	<0.001	Yes	0.303
39	Montenegro	0.392	9	0.297	No	0.154
40	Sierra Leone	0.552	33	<0.001	Yes	0.305
		Median value 0.730				

Sources: http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries; http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries.

Notes: Where there was no available data for the year requested, a tolerance of two years was allowed. Therefore, in some cases the data for the years 2012 or 2013 were taken into account; hence, it was evident that these economies were among the world's 40 smallest economies.

Table 3 The Average Share of FDI in GDP in Percentage, 1981–2014, GDP Per Capita in 1981 and 2014, and the GDP Index (2014/1981, 1981 = 100) for the 40 Smallest National Economies in 1981 and 2014

No.	*National economies*	*The average share of FDI in GDP, %, 2014*	*GDP per capita 1981*	*GDP 2014/1981 index, 1981 = 100*	*No.*	*National economies*	*The average share of FDI in GDP, %, 2014*	*GDP per capita 2014*	*GDP 2014/1981 index, 1981 = 100*
1	Kiribati	0.4	487.3	569.02	1	Tuvalu	1.9	3826.9	434.26 (2013/1990)
2	Marshall Islands	2.1	972.6	615.46	2	Kiribati	0.4	1509.5	569.02
3	Equatorial Guinea	21.2	157.7	38593.28	3	Marshall Islands	2.1	3529.7	615.46 (2013/1981)
4	Maldives	4.0	273.3	6771.19	4	Palau	4.3	11879.7	325.96 (2014/1990)
5	St. Kitts and Nevis	14.4	1838.8	1473.48	5	Micronesia. Federated States	–1.5	3057.1	296.94 (2013/1983)
6	Tonga	1.2	666.0	697.90	6	Sao Tome and Principe	12.8	1810.7	436.59 (2014/2000)
7	Dominica	7.0	878.5	812.13	7	Tonga	1.2	4114.0	697.90
8	St. Vincent and the Grenadines	11.1	1007.0	974.19	8	Dominica	7.0	7244.5	812.13
9	Grenada	7.7	970.3	1003.79	9	Comoros	0.9	810.1	566.82
10	Vanuatu	7.6	832.8	811.97 (2013/ 1981)	10	St. Vincent and the Grenadines	11.1	6668.9	974.19
11	Micronesia, Federated States	–1.5	1320.1 (1983)	296.94 (2013/ 1983)	11	Samoa	1.6	4172.2	660.45 (2014/1982)
12	Comoros	0.9	358.6	566.82	12	Vanuatu	7.6	3148.0	811.97 (2013/1981)
13	Samoa	1.6	770.1 (1982)	660.45 (2014/ 1982)	13	Gambia. The	4.2	484.1 (2013)	368.92
14	Antigua and Barbuda	10.6	1784.4	1019.67	14	St. Kitts and Nevis	14.4	15510.4	1473.48
15	Cabo Verde	4.5	480.2	1341.66	15	Grenada	7.7	8573.7	1003.79
16	Bhutan	1.0	345.4	1244.2	16	Guinea-Bissau	1.2	567.8	660.74
17	St. Lucia	10.1	1273.0	896.86	17	Solomon Islands	4.9	2024.2	618.31
18	Guinea-Bissau	1.2	178.5	660.74	18	Antigua and Barbuda	10.6	13432.1	1019.67
19	Seychelles	8.7	2378.4	907.51	19	St. Lucia	10.1	7647.5	896.86
20	Solomon Islands	4.9	785.4	618.31	20	Seychelles	8.7	15543.2	907.51

No.	*National economies*	*The average share of FDI in GDP, %, 2014*	*GDP per capita 1981*	*GDP 2014/1981 index, 1981 = 100*	*No.*	*National economies*	*The average share of FDI in GDP, %, 2014*	*GDP per capita 2014*	*GDP 2014/1981 index, 1981 = 100*
21	Belize	4.6	1307.2	842.04	21	Timor-Leste	2.6	1169.0	421.74 (2014/2000)
22	Gambia, The	4.2	349.8	368.92	22	Djibouti	5.3	1813.6	463.80** (2014/1985)
23	Andorra	n/a	10372.3	835.28 (2013 /1981)	23	Belize	4.6	4831.2	842.04
24	Lesotho	7.7	323.8	480.90	24	Central African Republic	1.2	358.5	256.6
25	Liechtenstein	n/a	19512.9	1072.57 (2012/ 1981)	25	Bhutan	1.0	2560.5	1244.2
26	Guyana	7.0	724.1	566.03	26	Cabo Verde	4.5	3641.1	1341.66
27	Swaziland	3.6	919.8	594.56	27	Liberia	21.2	457.9	239.45
28	Central African Republic	1.2	296.9	256.6	28	Lesotho	7.7	1034.2	480.90
29	Somalia	–1.0	n/a	131.17 (1990/ 1981)	29	Maldives	4.0	7635.5	6771.19
30	Mauritania	5.3	473.8	676.63	30	Burundi	0.1	286.0	319.25
31	Liberia	21.2	451.5	239.45	31	Guyana	7.0	4053.9	566.03
32	Chad	4.7	190.2	1587.60	32	Andorra	n/a	42806.5 (2013)	835.28 (2013/1981)
33	Suriname	–5.7	2447.1	596.0 (2013/ 1981)	33	Swaziland	3.6	3477.1	594.56
34	Barbados	3.3	4402.6	459.16	34	Eritrea	4.2	544.5 (2011)	808.60 (2014/1992)
35	Togo	2.3	342.2	469.52	35	Fiji	4.4	5112.3	326.08
36	Burundi	0.1	228.6	319.25	36	Malawi	1.5	255.0	344.03
37	Botswana	3.0	1039.4	1472.64	37	Barbados	3.3	15366.3	459.16
38	Sierra Leone	1.9	353.3	438.84	38	Togo	2.3	635.0	469.52
39	Mauritius	1.5	1.170.0	1099.77	39	Montenegro	16.8	7378.5	465.64 (2014/2000)
40	Monaco	n/a	44364.7	504.07 (2011/ 1981)	40	Sierra Leone	1.9	766.0	438.84
	Median value	4.0				Median value	4.2		

Sources: Author's calculations, according to data from http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries and http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries.

Notes: The average share of FDI in GDP was calculated in the following way—first the share for every year and for each national economy was calculated; then the average share was calculated for all the years with the data available. The average share was then turned into percentage.

Table 4 Ordinary Least Squares Calculation Results

Country	*FDI*	*Constant*	*R-squared*	*Adjusted R-squared*	*F statistic*
Belize	0.25004***	14.606***	0.5733	0.5575	36.2802***
	(0.0000)	(0.0000)			(0.0000)
Bhutan	0.1591	17.4494***	0.2071	0.135	2.8734
	(0.1181)	(0.0001)			(0.1181)
Botswana	0.4673***	12.4913***	0.4177	0.3953	18.65***
	(0.0002)	(0.0000)			(0.0002)
Burundi	0.2868***	14.0916***	0.4214	0.385	11.644***
	(0.0036)	(0.0000)			(0.0036)
Central African	0.0384*	18.105***	0.2341	0.1703	3.668*
Republic	(0.079)	(0.0000)			(0.0796)
Chad	0.2856***	15.5501***	0.7357	0.7211	50.116***
	(0.0000)	(0.0000)			(0.0000)
Comoros	0.0699***	17.052***	0.675	0.6479	24.929***
	(0.0003)	(0.0000)			(0.0003)
Djibouti	0.3142***	13.304***	0.6217	0.5947	23.005***
	(0.0003)	(0.0000)			(0.00028)
Equatorial	0.2921***	15.431***	0.5937	0.5797	42.38***
Guinea	(0.0000)	(0.0000)			(0.0000)
Eritrea	–0.0707	20.273***	0.031	–0.038	0.455
	(0.5108)	(0.0000)			(0.5108)
Gambia	0.1133	17.039***	0.1799	0.077	1.7547
	(0.2219)	(0.0000)			(0.2218)
Lesotho	0.231***	15.713***	0.5144	0.4982	31.779***
	(0.0000)	(0.0000)			(0.0000)
Liberia	0.1867**	15.364***	0.3153	0.2583	5.527**
	(0.0366)	(0.0000)			(0.03664)
Malawi	–0.1017	22.449***	0.0145	–0.094	0.1333
	(0.7235)	(0.0018)			(0.7235)
Mauritania	0.2207***	15.881***	0.4566	0.4371	23.525***
	(0.0000)	(0.0000)			(0.0000)
Mauritius	0.1813***	17.611***	0.5832	0.5693	41.97***
	(0.0000)	(0.0000)			(0.0000)
Montenegro	0.4862*	10.537*	0.4683	0.3797	5.285*
	(0.0612)	(0.0505)			(0.0611)
Sierra Leone	0.1632***	16.047***	0.6961	0.6527	16.033***
	(0.0052)	(0.0000)			(0.00516)
Swaziland	0.0589	18.684***	0.031	–0.0092	0.7723
	(0.3882)	(0.0000)			(0.3882)
Timor-Leste	0.1387**	17.151***	0.5229	0.4435	6.579**
	(0.0426)	(0.0000)			(0.0426)
Togo	0.1464***	17.111***	0.2697	0.2436	10.339***
	(0.0033)	(0.0000)			(0.00327)
Vanuatu	0.5102**	9.999**	0.4788	0.4137	7.349**
	(0.0266)	(0.0154)			(0.02661)

Sources: http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries. Results are a product of authors' calculations and GRETL (Gnu Regression, Econometrics and Time-series Library) software output.

Notes: Values in the parenthesis represent the *p* value. *, **, and *** indicate statistical significance at the respective 0.1, 0.05, and 0.01 levels of significance.

As can be seen from the results, due to the value of the *F* statistic, the vast majority of the models can be seen as statistically significant at the $p = 0.05$ significance level. The vast majority of the results suggest that FDI has a statistically significant and positive impact on GFCF. The countries where that impact is most pronounced based on the coefficient value are Montenegro and Vanuatu. In these two countries, the rise of 2% of FDI accounts for 1% change in the GFCF. These results should be taken with caution, as the sample for both of these countries is relatively small. No statistically significant negative impact of FDI on GFCF was detected. Swaziland and Eritrea had a large enough sample, yet in these countries, no positive effect of FDI on GFCF seems to be statistically significant. These and other case studies should in particular be conducted and the reasons for such a relationship examined.

The "Treasure Islands" Effect

Each of the small Caribbean island national economies that were among the world's 40 smallest economies in 2014 are shown in Table 5. These economies have shown a significant correlation between the FDI and GDP in the studied period. The average share of the FDI in GDP of these economies was also higher than in most of the other small economies, when these were combined and treated as a single group (including the small Caribbean island states). The median value of FDI in GDP for the 40 smallest economies in 1981 was 4.0%, while for the 40 smallest economies in 2014 it was 4.2%. On the contrary, the aforementioned "Treasure Islands" showed a median value of FDI in GDP of 10.1%. Without these seven small Caribbean island national economies included, the median value of FDI in GDP in 1981 for the 40 smallest economies would be 2.7%, and in 2014, it would be 3.8%. We can consider the so-called "Treasure Islands" (see Shaxson 2013) effect to be the most probable reason.

These seven small Caribbean island national economies were among the 40 of the world's smallest economies in the base year (1981) and in the final year (2014). Therefore, the median value of the correlation coefficient and the average share of FDI in GDP could be compared between their group and the group comprised of all 40 of the world's smallest economies, whose members were also these economies as well.

On the web pages of the World Bank, the socioeconomic data of the following dependencies that are evidently among the smallest economies (we deliberately do not call them "national economies" hence they do not even have their own formal political sovereignty) in the world are listed: American Samoa, Aruba, Bermuda, Cayman Islands, Curacao, Faeroe Islands, French Polynesia, Greenland, Guam, the Isle of Man, Macao (one special administration region [SAR] of China), New Caledonia, Northern Mariana Islands, Sint Maarten (Dutch part), St. Martin

Table 5 A High Probability of the "Treasure Islands" Effect in the Seven Small Caribbean Island National Economies: Median Values of the Pearson Correlation Coefficient, the Share of FDI in GDP (1981–2014), and the GDP Per Capita in Current US$ (1981 and 2014)

National economy	*The average share of FDI in GDP, %*	*Pearson correlation coefficient, r (FDI and GDP)*	*GDP per capita, US$ (1981)*	*GDP per capita, US$ (2014)*
St. Kitts and Nevis	14.4	0.932	1.838,3	15.510,4
St. Vincent and the Grenadines	11.1	0.875	1.007,0	6.668,9
Antigua and Barbuda	10.6	0.715	1.784,4	13.432,1
St. Lucia	10.1	0.730	1.273,0	7.647,5
Grenada	7.7	0.414	970.3	8.573,7
Dominica	7.0	0.609	878.5	7.244,5
Barbados	3.3	0.799	4.402,6	15.366,3
Median value	10.1	0.730	/	/

Sources: Author's calculations, according to data from http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries and http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries.

Notes: Hong Kong and Puerto Rico are also listed, however, from the available data about their GDP; these dependencies were not among the 40 smallest economies in the world in 2014. Nevertheless, due to the unavailability of data for most of these dependencies (either the data about GDP or the data about FDI, or both), the average share of FDI in GDP in percentage and the correlation between FDI and GDP could be calculated only for the following dependencies: Aruba, Bermuda, Macao (SAR China), and New Caledonia.

(French part), Turks and Caicos Islands, and the Virgin Islands (the United States). The ones for which the required data could be found are shown in Table 6.

It is evident that some small dependencies show the "Treasure Islands" effect as well, especially when it comes to the steep rise of the GDP. If the data were available for all of the Caribbean dependencies, it is highly probable that the data about GDP per capita would be similar to those for Aruba and Bermuda. Macao, as a "gambling paradise" and a tourist attraction, has managed to boost its nominal GDP per capita in current US$ by about 24.5 times in little more than 30 years.

The smallness and the vulnerability of the small Caribbean economies and the long-lasting inability of the "international community" have pushed them into the direction of becoming the so-called "Treasure Islands." Small Caribbean island economies have become famous in popular culture, and probably one of the first three associations that most of the people have about these islands, besides rum and palms, is the well-known fact that they represent tax havens and the places for offshore funds. This has been used in movies to describe the peculiarities of the political economy of these "Treasure Islands." One of the movies, filmed in 2014, titled *Turks & Caicos*, starring Bill Nighy, represents the second part of a TV movie trilogy (*Page Eight*, *Turks & Caicos*, and *Salting the Battlefield*). The trilogy tells a story about a long-serving MI5 officer Johnny Worricker, who has to flee from the United Kingdom after refusing to give up the document

Table 6 Dependencies as Small Economies: The Average Share of FDI in GDP (%), the Pearson Correlation Coefficient between FDI and GDP (1981–2014), and the GDP Per Capita in Current US$ (1981 and 2014)

Economy	*The average share of FDI in GDP in %, 1981–2014*	*Pearson correlation coefficient, r (FDI and GDP)*	*Years included*	*p value (at 0.05)*	*Significance*	*GDP per capita, US$ (1981)*	*GDP per capita, US$ (2014)*
Aruba	3.3	–0.061	18	0.810	No	n/a	25.353,8 (2011)
Bermuda	2.4	0.079	17	0.763	No	13.426,0	85.748,1 (2013)
Macao, SAR of China	4.3	0.734	32	<0.001	Yes	3.915,6 (1982)	96.038,1
New Caledonia	0.1	0.053	20	0.824	No	6.817,8	n/a

Sources: Author's calculations, according to data from http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries and http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries.

that threatens the political survival of the Prime Minister himself. What is most interesting is the conversation from the *Turks & Caicos* movie (in the 59th and 60th minute), between Worricker and a police officer from the islands Jim Carroll, who explains to Worricker the special status of the dependency: "You understand the Constitution of these islands? Did you know that Turks & Caicos is a crown protectorate? The currency is American, but the jurisdiction is British. We trade in the dollar, and kneel to the Crown." With a famous British cynicism, Worricker replies: "Yeah, what you might call the worst of both worlds." Various other examples of the British territories that conveniently serve as tax havens include the Cayman Islands and British Virgin Islands.[1]

Recent events, such as the revealing of the so-called "Panama Papers," which exposed a widespread network of tax-evasion schemes, connected with the financial interests of what can be designated as the transnational capitalist class (see Robinson 2005, 5–7), mostly from the West and the politicians from the West and from the other parts of the world, show us that the issue of tax havens is actual and important as it has ever been. The only difference is that it has not been revealed so far on such a scale. The mere founding and existence of some states is connected with the creation of tax havens, besides geopolitical reasons, with the will of the great powers, in this case the United States and its economic and political elite. Panama is probably the most characteristic example.[2]

The Relation between FDI Net Inflows and the Growth of the External Debt

To find out if there is a mathematical model possible between *FDI net inflows* and the growth of the *external debt* in small(est) economies (see Table 7), the authors

Table 7 The "Definite" List or the Bottom List of the 40 Most Consistent Small Economies regarding GDP (Comparison between 1981 Until 2014), GDP Ascending Economies

1	Tuvalu
2	Kiribati
4	Palau
3	Marshall Islands
6	Sao Tome and Principe
7	Tonga
8	Dominica
5	Micronesia. Federated States
10	St. Vincent and the Grenadines
14	St. Kitts and Nevis
9	Comoros
21	Timor-Leste
22	Djibouti
12	Vanuatu
15	Grenada
11	Samoa
18	Antigua and Barbuda
29	Maldives
34	Eritrea
16	Guinea-Bissau
35	Fiji
13	Gambia, The
36	Malawi
19	St. Lucia
17	Solomon Islands
39	Montenegro
20	Seychelles
25	Bhutan
26	Cabo Verde
23	Belize
24	Central African Republic
28	Lesotho
32	Andorra
31	Guyana
27	Liberia
33	Swaziland
30	Burundi
37	Barbados
38	Togo
40	Sierra Leone

Notes: The list was created based on direct comparison using point system of the bottom 40 small economies (GDP ascending) in 1981 and in 2014 (presented in Table 3).

created a simple linear regression model based on the yearly *FDI net inflows* and the *external debt* (in current US$) values for the 10 smallest economies, shown in Table 8 (Important notice: some of the countries did not have the data provided; hence, the available data from "next in line" countries were used).

Table 8 The Countries Used for the Regression Model (GDP Ascending)

1	Sao Tome and Principe
2	Tonga
3	Dominica
4	St. Vincent and the Grenadines
5	Comoros
6	Djibouti
7	Vanuatu
8	Grenada
9	Maldives
10	Eritrea

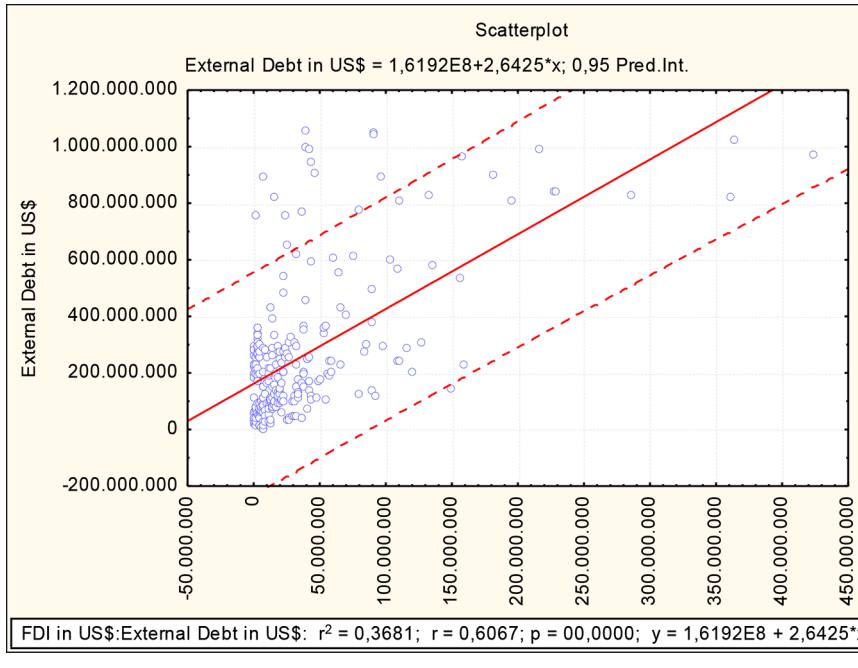

Figure 1 Simple Linear Regression Model Analysis between FDI Net Inflows (in US$, Independent Variable) and External Debt (in US$, Dependent Variable) for the 10 Smallest Economies in the World—Prediction Interval

Sources: World Bank data, http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries, http://data.worldbank.org/indicator/DT.DOD.DPPG.CD/countries.

For each country studied, *FDI net inflows* and *the external debt* (in current US$) from 1981 (where available) until 2013 were interconnected and put into two variables: *FDI net inflows* as the independent variable and *the external debt* as the dependent variable. The main hypothesis was that the more *FDI* capital flows into small economies (in average), the more *external debt* is generated. Accordingly,

the null hypothesis would state that the simple linear regression model is not adequate and no linear connection (trend) between *FDI* and *external debt* exists. Based on the model, the results are as follows (see Figures 1 and 2):

A simple linear regression model using *FDI* and e*xternal debt* (mainly regarding confidence interval) as interconnected variables is significant (*p* value is 0.00), meaning the null hypothesis can be rejected.

The resulted trend model is: External debt = 2.6425 × FDI + 1.6192E8

There is a connection between the increasing *FDI* and the increased *external debt*, although the linear trend model cannot be interpreted in a meaningful way because of a large variability of the mean (residuals) and low R^2 value of 36%. However, authors can also pose a research question for the future studies: Would these results be significantly different if small economies of the world were first grouped into regional groupings (Africa, Asia, the Pacific Ocean, the Caribbean,

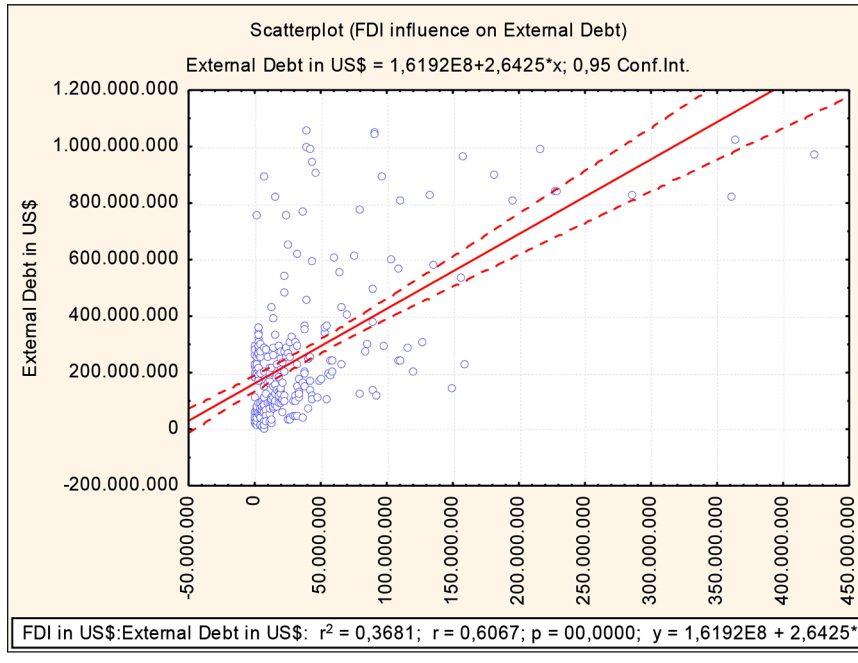

Figure 2 Simple Linear Regression Model Analysis between FDI Net Inflows (in US$, Independent Variable) and External Debt (in US$, Dependent Variable) among the 10 Smallest Economies in the World—Confidence Interval

Sources: World Bank data, http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries, http://data.worldbank.org/indicator/DT.DOD.DPPG.CD/countries.

and Europe) and then the same indicators were studied and linear regression model using FDI and external debt was developed.

The 15 Largest Economies of the World as the "Control Group" in the Study of Correlation between the FDI and the GDP

All results for the 15 of the world's largest economies in 1981 and 2014 were significant (see Tables 9 and 10). In some cases (China[3], Brazil, and India), the Pearson correlation coefficient (r) between FDI and GDP showed almost a perfect positive correlation between the two variables (Pearson correlation reference intervals: $-1 < r < 1$; –1: absolutely negative correlation, 0: no correlation, 1: absolutely positive correlation).

There were only a couple of changes among the 15 largest economies of the world. Saudi Arabia and the Netherlands were among the world's largest economies in 1981, but not in 2014. If the data for the Soviet Union were included, then the Netherlands would not be on the list for the year 1981. In 2014, Republic of Korea and Russian Federation (in this case, it is a substitution for the Soviet Union) were included among the world's 15 largest economies. According to these data, the China's economy was the world's 12th largest economy in 1981 and in 2014 it was the second. Concurrently, China shows the highest value of

Table 9 The 15 Largest Economies of the World in 1981: GDP, Pearson Correlation Coefficient, p Value, and Determination Calculated for FDI and GDP 1981–2014

No.	*National economies*	*Pearson correlation coefficient, r (FDI and GDP)*	*p value (at 0.05)*	*Determination (r^2)*
1	United States	0.784	<0.00001	<0.00001
2	Japan	0.354	0.039976	0.00160
3	Germany	0.415	0.014666	0.00022
4	France	0.649	0.00003	<0.00001
5	United Kingdom	0.611	0.000124	<0.00001
6	Italy	0.553	0.000694	<0.00001
7	Canada	0.715	<0.00001	<0.00001
8	Brazil	0.935	<0.00001	<0.00001
9	Mexico	0.903	<0.00001	<0.00001
10	Spain	0.789	<0.00001	<0.00001
11	India	0.917	<0.00001	<0.00001
12	China	0.974	<0.00001	<0.00001
13	Saudi Arabia	0.623	0.00008	<0.00001
14	Australia	0.862	<0.00001	<0.00001
15	Netherlands	0.666	0.00002	<0.00001

Notes: The Pearson correlation coefficient (r) between FDI and GDP was calculated based on 34 years for all economies except for the economy of China, for which it was calculated based on 33 years (the data for the FDI in the year 1981 were not available). In 1981, the economy of the Soviet Union was among the world's largest economies as well.

Table 10 The 15 Largest Economies of the World in 2014: GDP, Pearson Correlation Coefficient, *p* Value, and Determination Calculated for FDI and GDP 1981–2014

No.	*National economies*	*Pearson correlation coefficient, r (FDI and GDP)*	*p value (at 0.05)*	*Determination (r^2)*
1	United States	0.784	<0.00001	<0.00001
2	China	0.974	<0.00001	<0.00001
3	Japan	0.354	0.039976	0.00160
4	Germany	0.415	0.014666	0.00022
5	United Kingdom	0.611	0.000124	<0.00001
6	France	0.649	0.00003	<0.00001
7	Brazil	0.935	<0.00001	<0.00001
8	Italy	0.553	0.000694	<0.00001
9	India	0.917	<0.00001	<0.00001
10	Russian Federation*	0.899	<0.00001	<0.00001
11	Canada	0.715	<0.00001	<0.00001
12	Australia	0.862	<0.00001	<0.00001
13	Korea, Rep.	0.864	<0.00001	<0.00001
14	Spain	0.789	<0.00001	<0.00001
15	Mexico	0.903	<0.00001	<0.00001

Notes: The Pearson correlation coefficient (*r*) between FDI and GDP was calculated based on 34 years for all economies, except for Russian Federation, for which it was calculated based on 23 years due to the unavailable data.

Pearson correlation coefficient for the aforementioned period among the largest economies of the world studied.

Table 11 shows that among the 15 largest world economies, the Netherlands (was the world's 15th largest economy in 1981, but not among the 15 largest economies in 2014) with the average share of FDI in GDP of 12.1% in the 1981–2014 period stands out. The "next best" in the same category were China and the United Kingdom with the average share of 2.9%. On the other end were Japan and Italy. The difference between two different paths of economic development, especially when it comes to the role of FDI in generating GDP growth, can be seen most visibly if we briefly compare the stance toward the FDI in China and Japan, as probably the perfect opposites regarding this issue among the 15 largest economies of the world.

There are various explanations of the fact why China is so attractive for FDI, and why Japan shows quite the opposite signs. The share of FDI in GDP in China rose sharply in 1992 (from 1.1% in 1991 to 2.6% in 1992) and 1993 (to 6.2%) especially. Chinese FDI trends can be distinguished according to changes in policy directions—first phase: 1979–83, second phase: 1984–91, and third phase: 1992–99. Among the three forms of capital inflow—FDI, external loans, and other foreign investment—the shares of these flows have changed gradually from the 1980s to the 1990s. During the 1980s, capital inflows into China were dominated by external loans, accounting for around 60% of China's total capital inflows.

Table 11 The Average Share of FDI in GDP in Percentage, 1981–2014, and the GDP Index (2014/1981, 1981 = 100) for the 15 Largest National Economies in 1981 and 2014

No.	*National economies*	*The average share of FDI in GDP, %*	*GDP 2014/1981 index, 1981 = 100*	*No.*	*National economies*	*The average share of FDI in GDP, %*	*GDP 2014/1981 index, 1981 = 100*
1	United States	1.2	542.5	1	United States	1.2	542.5
2	Japan	0.1	383.0	2	China	2.9	5327.4
3	Germany	1.2	485.1	3	Japan	0.1	383.0
4	France	1.6	458.1	4	Germany	1.2	485.1
5	United Kingdom	2.9	552.7	5	United Kingdom	2.9	552.7
6	Italy	0.6	498.6	6	France	1.6	458.1
7	Canada	2.2	583.9	7	Brazil	1.9	890.1
8	Brazil	1.9	890.1	8	Italy	0.1	498.6
9	Mexico	2.1	517.7	9	India	0.8	1040.5
10	Spain	2.4	683.0	10	Russian Federation*	1.9	404.2
11	India	0.8	1040.5	11	Canada	2.2	583.9
12	China	2.9	5327.4	12	Australia	2.4	824.1
13	Saudi Arabia	1.9	404.9	13	Korea, Rep.	0.6	1849.9
14	Australia	2.4	824.1	14	Spain	2.4	683.0
15	Netherlands	12.1	542.7	15	Mexico	2.1	517.7

Sources: Author's calculations, according to data from http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries and http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD/countries.

Notes: Russia replaced the Soviet Union among the 15 largest economies of the world. The economy of the Soviet Union was omitted in the data for 1981; hence, this country no longer exists.

Since 1992, however, the inflows of FDI surpassed external loans and have been the dominant source of capital inflows, accounting for around 70% the total capital inflows (Organization for Economic Cooperation and Development 2000, 5).

China has remained attractive for FDI until the present day (the average share calculated for the 1992–2014 period only would be 3.9%). Xing (2006, 199), citing various authors, emphasizes potential market size, low labor cost, preferential policies (e.g., tax credits), openness, geographic proximity, and political stability as primary factors attracting FDI. Xing states, "the role of China's exchange rate policy in determining FDI is largely ignored in the literature." Zhang (2011) accentuates the role of government policy.

In terms of inbound and outbound FDI flows, Japan consistently invests far more overseas than it receives from abroad. Explanations for this imbalance have included the nature of Japanese business organization ownership structures of Japanese firms; dominance in key industrial sectors including automobiles, electronics, and consumer electrical goods; societal preferences for Japanese goods and employers; and a difficult and costly business environment (Staples 2011, 2–3).

There are many misunderstandings concerning inward investment in Japan. The Japanese people view FDI negatively—at times even likening it to "hyena" capital. This aversion to foreign capital probably arises because they believe (1) unlike greenfield investment, M&A (mergers & acquisitions, author's remark) does not necessarily bring increased employment or capital; (2) jobs may not be secure, since management will seek efficiency gains by downsizing human resources; (3) the real purpose is just to acquire superior Japanese technology; or (4) most FDI is by financial investors (funds) seeking short-term profit and a quick exit (Fukao and Amano 2003, 2).

Conclusion

Small states, especially the island ones, face many challenges that large states are not faced with. However, that does not mean the small states are determined to be poor and vulnerable simply because of their smallness. A number of different factors were pointed out here, which can make small states more resilient. Some of these factors derive particularly from smallness, such as social cohesion and the ability to make necessary changes in shorter period.

The majority of the small economies that were analyzed, especially the ones where the number of analyzed years was over 30 (due to a satisfactory availability of data) showed a significant correlation between FDI and GDP in the analyzed period. A linear regression model done here, using FDI and external debt (mainly regarding confidence interval) as interconnected variables is significant (p value is 0.00), meaning that the null hypothesis can be rejected. There is a connection between the increasing FDI and the increased external debt, although the linear model cannot be interpreted in a representative way because of a large variability of the mean (residuals) and low R^2 value of 36%.

When we compare the average share of FDI in GDP for the 40 smallest and the 15 largest (a control group) of the world's economies in 1981 and 2014, it is evident that most of the smallest economies show a significantly higher average share of FDI in GDP in the period that was studied. Hence, the absolute values differ enormously; this is something quite normal and expected. In a very small economy, one moderate foreign investment can change the share in GDP in a particular year significantly, which is impossible in large economies.

When the change in GDP in the studied period is considered, the largest economies show visible differences. The emerging economies stand out (especially China, but India and Brazil as well). These three economies can be also considered as contender states. Russia is the only state besides the emerging economies already mentioned that was among the world's 15 largest economies in 2014. By the change in GDP in the 1981–2014 period, Republic of Korea holds the second

place. Nevertheless, it belongs to the Triad,[4] and according to the framework of geopolitical economy, it is definitely not a contender state to the contemporary world order, but a valuable ally of the primary dominant state. Other largest economies of the world, besides emerging economies, belong to the Triad, being members of the various political organizations, economic integrations, and/or military alliances that are led by the United States, or the United States has a very good relation with them.

Notes

1. See http://www.theguardian.com/business/2016/apr/12/overseas-territories-spared-from-uk-law-on-company-registers, accessed April 12, 2016.
2. See http://www.theguardian.com/world/2016/apr/10/panama-canal-president-jp-morgan-tax-haven, accessed April 11, 2016.
3. All the data for China regarding GDP and FDI exclude Hong Kong and Macao; hence, these special administrative areas are shown separately in the World Bank data.
4. For the concept of the Triad, see Hanggi and Regnier (2000).

References

Armstrong, H. W., and R. Read. 2000. "Comparing the Economic Performance of Dependent Territories and Sovereign Microstates." *Economic Development and Culture Change* 48 (2): 285–306.

Armstrong, H. W., and R. Read. 2002. "The Phantom of Liberty? Economic Growth and the Vulnerability of Small States." *Journal of International Development* 14 (4): 435–58.

Armstrong, H. W., and R. Read. 2006. "Geographical 'Handicaps' and Small States: Some Implications for the Pacific from a Global Perspective." *Asia Pacific Viewpoint* 47 (1): 79–92.

Bailes, A. J. K., and B. Thorhallsson. 2012. "Instrumentalizing the European Union in Small State Strategies." *Journal of European Integration* 35 (2): 99–115.

Baldacchino, G. 2000. "The Challenge of Hypothermia: A Six-Proposition Manifesto for Small Island Territories." *The Round Table: Commonwealth Journal of International Affairs* 89 (353): 65–79.

Baldacchino, G. 2012. "Governmentality Is All the Rage: The Strategy Games of Small Jurisdictions." *The Round Table: Commonwealth Journal of International Affairs* 101 (3): 235–51.

Bourne, C. 2003. "Small States in the Context of Global Change." Paper presented at the Fourth Annual Conference of Sir Arthur Lewis Institute of Social and Economic Studies, Cave Hill, Barbados, January 15–17.

Briguglio, L. 1995. "Small Island States and Their Economic Vulnerabilities." *World Development* 23 (9): 1615–32.

Briguglio, L., and E. Kisanga, eds. 2004. *Economic Vulnerability and Resilience of Small States*. La Valletta: Islands and Small States Institute of the University of Malta and the Commonwealth Secretariat.

Brito, J. A. 2015. "Environmental Vulnerability and Economic Growth: Small States vs. Large States." Munich Personal RePEc Archive (MPRA) Paper No. 65694. Accessed December 4, 2016. http://mpra.ub.uni-muenchen.de/65694/.

Camilleri, S. J., and J. Falzon. 2013. "The Challenges of Productivity Growth in the Small Island States of Europe: A Critical Look at Malta and Cyprus." *Island Studies Journal* 8 (1): 131–64.

Campling, L. 2006. "A Critical Political Economy of the Small Island Developing State Concept: South-South Cooperation for Small Island Citizens." *Journal of Developing Societies* 22 (3): 235–85.

Castello, S., and T. Ozawa. 1999. *Globalization of Small Economies as a Strategic Behavior in International Business*. New York: Garland Publishing.

Cole, R. V. 1993. "Economic Development in the South Pacific: Promoting the Private Sector." *World Development* 21 (2): 233–45.

Congdon Fors, H. 2007. "Island Status, Country Size and Institutional Quality in Former Colonies." Working Paper, School of Business, Göteborg University, Göteborg.

Connell, J. 2013. "Medical Tourism in the Caribbean Islands: A Cure for Economies in Crisis?" *Island Studies Journal* 8 (1): 115–30.

Dumienski, Z. 2014. "Microstates as Modern Protected States: Towards a New Definition of Micro-Statehood." Occasional Paper, Centre for Small States Studies, Institute of International Affairs, Reykjavik.

East, M. A. 1973. "Size and Foreign Policy Behavior: A Test of Two Models." *World Politics* 25 (4): 556–76.

Easterly, W., and A. Kraay. 2000. "Small States, Small Problems? Income, Growth, and Volatility in Small States." *World Development* 28 (11): 2013–27.

Fukao, K., and T. Amano. 2003. "Inward FDI and the Japanese Economy." http://www.elsi-project.eu/fileadmin/user_upload/Investing_and_localizing_in_Japan__EU-Japan_Centre__GUIDE_pdf.

Greig, A., M. Turner, and P. D'Arcy. 2011. "The Fragility of Success: Repositioning Mauritian Development in the Twenty-First Century." *Island Studies Journal* 6 (2): 157–78.

Guillaumont, P. 2010. "Assessing the Economic Vulnerability of Small Island Developing States and the Least Developed Countries." *Journal of Development Studies* 46 (5): 828–54.

Hanggi, H., and P. Regnier. 2000. "The Small State and the Triad: The Case of Switzerland's Foreign Policy towards East Asia." Study in NRF Policy, National Foreign Policy Program, Bern.

Katzenstein, P. J. 1984. *Corporatism and Change: Austria, Switzerland, and the Politics of Industry*. Ithaca: Cornell University Press.

Katzenstein, P. J. 1985. *Small States in World Markets: Industrial Policy in Europe*. Ithaca: Cornell University Press.

Katzenstein, P. J. 1997. "The Smaller European States, Germany and Europe." In *Tamed Power: Germany in Europe*, edited by P. J. Katzenstein, 251–304. Ithaca: Cornell University Press.

Laguardia Martinez, J. 2014. "Small States in the Global System." Working material for a course in Institute of International Relations, University of the West Indies, St. Augustine, Trinidad and Tobago.

McGillivray, M., W. Naudé, and A. U. Santos-Paulino. 2010. "Vulnerability, Trade, Financial Flows and State Failure in Small Island Developing States." *Journal of Development Studies* 46 (5): 815–27.

Neumann, I. B., and S. Gstöhl. 2004. "Lilliputians in Gulliver's World? Small States in International Relations." Working Paper 1-2004, Centre for Small State Studies, Institute of International Affairs, University of Iceland, Reykjavik.

Organization for Economic Cooperation and Development. 2000. "Main Determinants and Impacts of Foreign Direct Investment on China's Economy." OECD Working Papers on International Investment 04/2000. Paris: Organization for Economic Cooperation and Development.

Ólafsson, B. G. 1998. *Small States in the Global System: Analysis and Illustrations from the Case of Iceland*. Aldershot: Ashgate.

Panke, D. 2012. "Dwarfs in International Negotiations: How Small States Make Their Voices Heard." *Cambridge Review of International Affairs* 25 (3): 313–28.

Philpot, D., T. S. Gray, and S. M. Stead. 2015. "Seychelles, a Vulnerable or Resilient SIDS? A Local Perspective." *Island Studies Journal* 10 (1): 31–48.

Robinson, W. I. 2005. "Gramsci and Globalisation: From Nation-State to Transnational Hegemony." *Critical Review of International Social and Political Philosophy* 8 (4): 1–16.

Shaxson, N. 2013. *Treasure Islands*. New York: Vintage Books.

Simpson, G. 1990. "Wallerstein's World-Systems Theory and the Cook Islands: A Critical Examination." *Pacific studies* 14 (1): 73–94.

Slinger-Friedman, V. 2009. "Ecotourism in Dominica: Studying the Potential for Economic Development, Environmental Protection and Cultural Conservation." *Island Studies Journal* 4 (1): 3–24.

Staples, A. 2011. "Foreign Direct Investment and Economic Revitalization in Japan: The Role of the Foreign Firm in Niseko." Proceedings of the 28th Annual Euro-Asia Management Studies Association Conference "The Changing Competitive Landscape in Euro-Asia Business Relations," Gothenburg.

Thorhallsson, B. 2010. "The Corporatist Model and Its Value in Understanding Small European States in the Neoliberal World of the Twenty-First Century: The Case of Iceland." *European Political Science* 9 (3): 375–86.

van der Pijl, K. 2014. *The Discipline of Western Supremacy: Modes of Foreign Relations and Political Economy*. Vol. 3. London: Pluto Press.

Xing, Y. 2006. "Why Is China So Attractive for FDI? The Role of Exchange Rates." *China Economic Review* 17 (2): 198–209.

Zhang, N. 2011. "Foreign Direct Investment in China: Determinants and Impacts." PhD diss., University of Exeter. https://ore.exeter.ac.uk/repository/bitstream/handle/10036/3320/ZhangN.pdf?sequence=2.