Derterminants of FDI Inflows to Developing and Least Developed Countries

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Abstract The purpose of this paper is to explore the determinants of FDI inflows to developing and least-developed countries. The empirical study consists of 102 developing and least developed countries as classified by the United Nations in the period from 2000 to 2019. The fixed effect model with the Driscoll and Kraay standard errors estimation is used and the results reveal that market size, infrastructure development, financial development, economic freedom, and economic globalization play as FDI stimulus factors while social and political globalization have a negative effect on FDI inflows in all countries. Quality of labor force, while having a positive effect on inward FDI in the developing country group, shows to be a drag in FDI inflows in the least developed country group. There is a strong evidence of market-seeking FDI in all countries, natural-seeking FDI in least developed countries, and efficiency-seeking FDI is more evident in developing countries.

Keywords Foreign direct investment · FDI determinants · Developing and least developed countries

1 Introduction

It is a wide belief that foreign direct investment (FDI) plays an important role in economic growth of developing countries. FDI does not only contribute direct capital stock to the host countries but is also considered as an effective source for local labor training, the demonstration of managerial skills and expertise as well as a valuable channel for the transfer of advanced technologies (Abbes et al., 2015). Attraction of FDI to the countries has become the important goal that governments in developing countries wish to pursue. For the governments in developing countries to successfully achieve their goal, it is important that they need to know what are the factors that multinational firms consider when investing overseas.

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A. T. Nguyen et al. (eds.), *Contemporary Economic Issues in Asian Countries: Proceeding of CEIAC 2022, Volume 1*,
https://doi.org/10.1007/978-981-19-9669-6_15

The determinants of FDI are complex covering a wide range from traditional to institutional factors. In traditional views, factors affecting FDI include the host country's market size and its potential growth, infrastructure, technology, human factor, geographic location, and natural resources. Foreign investors are either motivated by interest in accessing and exploiting natural resources (natural resource-seeking FDI), serving foreign markets (market-seeking FDI) or gaining higher productivity or lower costs of production (efficiency-seeking FDI) (Wadhwa & Reddy, 2011). The more recent views look at institutional quality, such as the provision of business-friendly environment or the degree of the country's openness (Sabir et al., 2019).

There are an extensive number of studies aimed at finding the determinants of FDI inflows, and the majority focused on developing countries. Those studies are conducted at the individual country level, the group of countries by region, or the pool of developing countries worldwide. However, in the so-called developing countries, the level of development varies among them. Based on human development and socioeconomic development, the United Nations (World Economic Situation and Prospects, 2018) distinguish least-developed countries from developing countries. According to the United Nations, least-developed countries are low-income countries with low levels of human assets and suffer high economic vulnerability. Despite the distinction between developing and least-developed countries, there is lack of studies on determinants of FDI inflows to the developing world taking into consideration of this issue. The purpose of this paper is to fill this gap where we seek to explore the determinants of inward FDI in developing countries in comparison to that in least developed countries.

The rest of the paper is organized as follows. Literature review is provided in Sect. 2 and followed by methodology in Sect. 3. Section 4 discusses the results, and finally, Sect. 5 is the conclusion.

2 Literature Review

Market size is considered as the most crucial factor for attracting foreign direct investment due to high expected demand and prospects of economies of scale. The market size hypothesis claims that efficient utilization of resources and exploitation of economies of scale demand for a large market (Balassa, 1966; Scaperlanda & Mauer, 1969). The implementation of superior technologies is effective for a large scale of production which in turn predetermines the size of the market. Foreign direct investment will be taken in a country only when the country meets the market requirements in terms of size. When the market size increases, the influx of FDI is stimulated to meet the growth in demand. There thus exists a positive relationship between foreign capital inflows and GDP growth of the host country. There are a number of empirical studies that supported for market size being a determinant of inward FDI. Hornberger et al. (2011) by summing up a set of 30 empirical studies on developing and transition economies conducted since 2000 found that the size and

growth potential of markets are significantly associated with foreign direct investment inflows. Studies by Kok and Ersoy (2009) for 24 developing countries and Wadhwa and Reddy (2011) for 10 Asian countries in the period 1991–2008 also confirmed a positive relationship between foreign direct investment and GDP. A more recent study by Gabriel et al. (2016) for Nigeria in the period 1970–2011 found that economy size has a statistically positive effect on foreign direct investment. Similarly, Petrović-Ranđelović et al. (2017) concluded that GDP growth fosters FDI inflows in the six countries of the Western Balkans region in the period 2007–2015.

In the traditional view, FDI is attracted to developing countries with the abundance of labor to take advantage of cheap labor cost. However, Pfeffermann and Madarassy (1992) argued that new technological advances have reduced the labor content and increased the knowledge content of production. For this reason, FDI has gradually moved away from low-cost and low-skilled labor-intensive industries toward more capital and knowledge-intensive industries. The availability of well-educated pool of workforce in the host countries has become an increasingly important factor attracting multinational corporations. Empirical studies supported for both views of cheap labor costs and human capital being determinants of FDI inflows. Donaubauer and Dreger (2018) reasoned that the increase in wages in China has caused a shift of FDI away from China to low-wage countries in the Asian region. In examining the determinants of FDI in selected Central and Eastern European Countries (CEECs) for the period of 1995–2003, Bellak et al. (2008) found that higher labor costs affect FDI negatively, whereas the impact of higher labor productivity on FDI is positive. Similarly, Abbas et al. (2021) concluded that both cheap and skilled labor in the host country play as the driven factor to attract FDI. Noorbakhsh et al. (2001) claimed that human capital is one of the most important determinants of FDI inflows to developing countries and its importance has become increasingly greater through time. A positive relationship between human capital and the inflows of FDI to developing countries is found in studies by Karimi et al. (2013) and Kheng et al. (2017).

Financial development plays the role in influencing FDI in two ways: direct and indirect effects. As argued by Desbordesa and Wei (2017), to engage in FDI foreign firms must incur substantial upfront fixed costs such as the cost of establishing or purchasing a production facility in the host country. Besides, due to the nature of projects with a large initial scale, a long gestation but a short harvest period, or the continuing investment requirement, firms may find it unable to finance the upfront fixed costs with internal funds (Rajan & Zingales, 1998). In such the case, firms must rely on external funds and their access to external finance depends on financial development. Higher financial development in the source countries would enable the firms to get external funds, and increase the volume of outward FDI from the source to the host countries. However, when the firms face with constraint of getting external funds from source countries' financial institutions, they may choose to use the source of external funds in the host countries if local financing conditions are favorable (Desai et al., 2004). Therefore, higher financial development in the host country can have a positive direct effect on the volume of inward FDI. Studies by Feinberg and Phillips (2004), Desai et al. (2006), and Bilir et al. (2019) supported the positive direct external finance effect of the host country's financial development when they

found that the expansion of the activities of U.S. foreign affiliates is constrained in host countries where external finance is relatively limited and expensive.

Beside the direct effect, higher financial development in the host country can also create an indirect effect on FDI through its promotion of competition and overall economic activity (Rajan & Zingales, 1998; Klapper et al., 2006; Manova, 2013). Higher financial development in the host country induces the entry of both local and foreign firms which raises the competition in the host country's market. Higher competition results in higher prices of local inputs while lower market share and thus a decline in potential sale volume and profits for foreign firms. This obviously creates a bad effect on foreign firms targeting the host country's market and makes a country a less attractive destination than before. The negative indirect competition effect of the host country's financial development is evidence in the finding by Ju and Wei (2010).

The country's openness is considered to be a key determinant of FDI inflows. A considerable amount of empirical studies has been conducted on this relationship and in these studies, trade openness measured by the ratio of trade volume to GDP is used as a proxy for the openness of the country. The majority of studies supported for a positive relationship between trade openness and FDI inflows. Among them are Neumayer and Soysa (2004), Liargovas et al. (2012), Makoni (2018), and Zaman et al. (2018). According to these studies, foreign direct investment is more attracted to those countries with lower restrictions on import and export activities. A negative relationship between trade openness and FDI inflows is found in other studies (Cantah et al., 2018; Khan & Hye, 2014 and Mudiyanselage et al., 2021). And yet studies by Ho et al. (2013) and Wickramarachchi (2019) found that trade openness had no significant impact on FDI inflows.

As defined by Gwartney et al. (2017), economic freedom refers to the extent to which economic activities are "coordinated by personal choice, voluntary exchange, open markets, and clearly defined and enforced property rights". Economic freedom shapes the business climate in which foreign firms operate and thus affects foreign investors' decision in choosing the location to invest. The relation between economic freedom and FDI inflows has captured attention from many researchers. The majority found evidence that economic freedom has a positive impact on FDI inflows. Among these works are Bengoa and Sanchez-Robles (2003) for 18 Latin-American countries, Quazi (2007) for 7 East Asian countries, Nasir and Hassan (2011) for South Asian countries, Moussaa et al. (2016) for 156 countries, Hossain (2016) for 79 developing countries, Imtiaz and Bashir (2017) for 20 South Asian countries, Barua et al. (2017) for 81 countries, and Sooreea et al. (2020) for 40 Sub-Saharan African countries.

3 Methodology

The determinants of FDI inflows to developing and least-developed countries are considered to include market size, labor factor, infrastructure development, financial

development, natural resource, economic freedom, and the degree of the country's openness (Fig. 1)

The empirical study is conducted with 102 countries including 67 developing and 35 least-developed countries as classified by the United Nations in the period from 2000 to 2019. The chosen period of study is mainly constrained by the availability of data. Based on the conceptual framework, the regression equation is written as

$$\begin{aligned}\mathrm{FDI}_{i,t} = c + \beta_1 \mathrm{GDP}_{i,t} + \beta_2 \mathrm{POP}_{i,t} + \beta_3 \mathrm{QLF}_{i,t} + \beta_4 \mathrm{URB}_{i,t} + \beta_5 \mathrm{FIN}_{i,t} + \beta_6 \mathrm{NAR}_{i,t} \\ + \beta_7 \mathrm{EFR}_{i,t} + \beta_8 \mathrm{EGI}_{i,t} + \beta_9 \mathrm{SGI}_{i,t} + \beta_{10} \mathrm{PGI}_{i,t} + \alpha_i + \mu_t + e_{i,t}\end{aligned}$$

where subscript i denotes country and t denotes time in year.

Variable description.

FDI inflow (FDI): this variable is measured as net inflows of foreign direct investment in percentage of GDP. Data for net inflows of foreign direct investment is taken from World Development Indicators (World Bank).

Market size (GDP): this variable is measured as the growth rate of GDP. Data for annual GDP growth rate is taken from World Development Indicators (World Bank).

Size of labor force (POP): this variable is measured as the natural logarithm of total population. Data for total population is taken from World Development Indicators (World Bank).

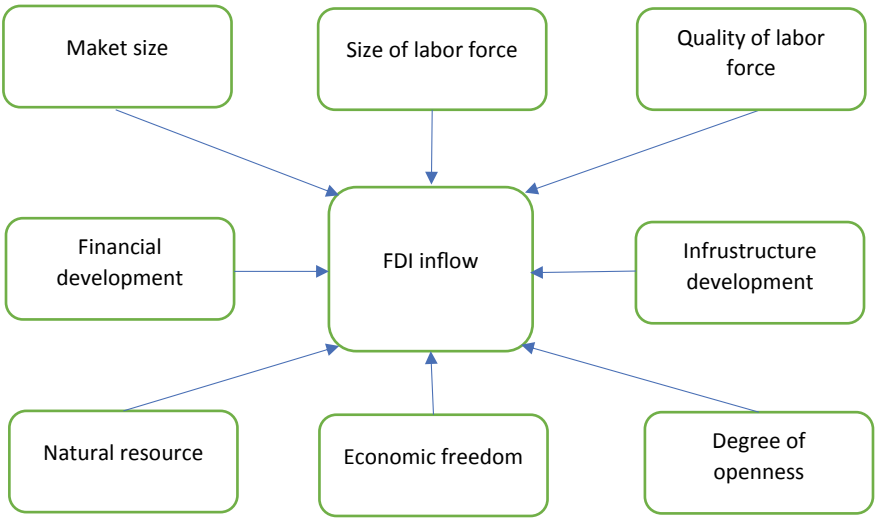

Fig. 1 Conceptual framework on determinants of FDI inflows to developing and least-developed countries (*Source* Author's proposed conceptual framework based on literature reviews)

Quality of labor force (QLF): a good proxy for the measurement of labor quality is education level which is provided by the education index (UNDP Human Development Reports). The education index is calculated as an average of adult's mean years of schooling and children's expected years of schooling.

Infrastructure development (URB): this variable is measured by the rate of urbanization where the rate of urbanization is the percentage of total population who are living in urban area. Data for the rate of urbanization is taken from World Development Indicators (World Bank).

Financial development (FIN): this variable measures the level of a country's financial development. The Financial Development Index which is developed by the International Monetary Fund is used as it captures the complex multidimensional nature of financial development. The index has the maximum score of 1.0, and a higher score means a higher degree of financial development.

Natural resource (NAR): this variable is measured as total natural resources rents in percentage of GDP. Data for total natural resources rents is taken from World Development Indicators (World Bank).

Economic freedom (EFR): this variable measures the extent to which government provides a business-friendly environment conducive for the development of private business sector. Economic freedom is measured by the Index of Economic Freedom published by the Heritage Foundation. The maximum score for the index is 100, and a higher score means a higher level of economic freedom.

Degree of openness: The KOF Globalization Index (KGI) is used to measure the country's degree of openness. Globalization is defined as "a process that erodes national boundaries, integrates national economies, cultures, technologies, and governance, and produces complex relations of mutual interdependence" (Gygli et al., 2018). The index comprises of three dimensions which are economic globalization (EGI), social globalization (SGI), and political globalization (PGI). The score for each sub-index ranges from 0 to 100 with a higher score means the increase in the country's level of openness.

Since data for all countries is collected in the same time period, a strongly balanced panel data is provided. Firstly, the Hausman test is conducted which shows that fixed effect model is more appropriate than random effect model ($chi2(19) = 68.51$, $Prob > chi2 = 0.000$). Next, various diagnostics tests are followed. Modified Wald test for groupwise heteroskedasticity in fixed effect regression model shows there exists heteroskedasticity ($chi2(103) = 2.2e+05$, $Prob > chi2 = 0.000$). The Wooldridge test for autocorrelation in panel data confirms serial correlations ($F(1, 100) = 17.40$, $Prob > F = 0.000$). With the presence of serial correlations and heteroskedasticity problems in data, the Driscoll and Kraay standard errors estimation is used as suggested by Torres-Reyna (2007). In the model, dummy variables are included to distinguish between developing and least-developed countries.

4 Results

The regression results are reported in Table 1 which are used to summarize the effect of FDI determinants in developing and least developed countries in Table 2.

As can be seen from Table 2, with a positive value ($\beta = 0.15$), market size fosters the inflows of FDI in both groups of developing and least developed countries. This is an evidence of market-seeking FDI where foreign firms are attracted to countries experiencing high economic growth. High economic growth results in larger market size, a higher demand for firms' products, and thus an expansion of business prospect for foreign firms in the host countries.

There is a positive relation between quality of labor force and FDI inflows ($\beta = 7.86$) in the developing country group. Better quality of workers means higher labor productivity. One of the advantages for foreign firms is their access to superior technologies but the implementation of these superior technologies in the host country is subject to the ability of local workers to handle it. More educated and skilled local workers can be easier to get trained to work with advanced technologies. This is not only help foreign firms to gain competitive advantage over domestic firms but also enable them to increase their labor productivity leading way to earn higher profits. However, unlike developing countries, quality of labor force shows to have a negative effect on inward FDI ($\beta = -15.96$) in the least developed country group. This may suggest that quality of the workforce is not FDI driven factor but instead cheap labor costs attract FDI. Since the level of human capital in least developed countries is rather low, foreign firms are not ready to implement advanced technologies and may prefer to use labor-intensive technologies which enable them to exploit cheap labor costs. The increase in workers' quality may be associated with the requirement for higher wages and reduce the possibility of exploiting cheap labor costs for foreign firms, and thus discourage the inflows of FDI.

Infrastructure development stimulates the inflows of FDI in developing and least developed countries ($\beta = 0.06$). The availability and quality of infrastructure strongly influence business and production operations. For business activities to operate effectively and efficiently, there is the need for good-quality highways and railroads, street lighting, reliable telecommunication, stable power, and water supply. Better infrastructure would reduce the costs of production for firms, such as transportation costs or wasting time costs incurred because of production closedown due to abrupt failure of power or water supply.

Financial development shows to have a positive effect on FDI inflows in all countries ($\beta = 2.67$). Higher financial development in the host country enables foreign firms to gain more access to external funds allowing for the expansion of their activities in the host country. Moreover, when foreign firms operate in the host countries they may establish forward and backward linkages with local firms. Local firms in downstream industries can buy inputs produced by foreign firms and local firms in upstream industries can supply their output to be used as inputs by foreign firms. With higher financial development, local firms are easier to get external funds which boost up their business activities and in turns stimulates foreign firms' business.

Table 1 Determinants of FDI inflows to developing and least developed countries

Explanatory variables	Coefficient	Standard error
GDP: Market size	0.145	0.065**
DUMMY–Least developed countries	0.049	0.054
POP: Size of labor force	0.269	0.325
DUMMY–Least developed countries	− 0.491	0.194**
QLF: Quality of labor force	7.858	2.865**
DUMMY–Least developed countries	− 23.817	3.686***
URB: Infrastructure development	0.056	0.009***
DUMMY–Least developed countries	− 0.005	0.030
FIN: Financial development	2.673	1.070**
DUMMY–Least developed countries	22.649	14.215
NAR: Natural resource	− 0.101	0.017***
DUMMY–Least developed countries	0.125	0.070*
EFR: Economic freedom	0.069	0.025**
DUMMY–Least developed countries	− 0.070	0.055
EGI: Economic globalization	0.125	0.021***
DUMMY–Least developed countries	0.148	0.060**
SGI: social globalization	− 0.174	0.044***
DUMMY–Least developed countries	0.121	0.032***
PGI: Political globalization	− 0.164	0.034***
DUMMY–Least developed countries	0.126	0.038***
CONSTANT	− 1.370	3.771
Year dummies	Yes	
Number of observations	1933	

Dependent variable FDI inflows
Note ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$
Source Author's estimation (see Appendix)

Table 2 Effect of FDI determinants in developing and least developed countries

FDI determinants	Developing countries	Least developed countries
Market size	0.145	0.145
Size of labor force	None	− 0.491
Quality of labor force	7.858	− 15.959
Infrastructure development	0.056	0.056
Financial development	2.673	2.673
Natural resource	− 0.101	0.024
Economic freedom	0.069	0.069
Economic globalization	0.125	0.273
Social globalization	− 0.174	− 0.053
Political globalization	− 0.164	− 0.038

Source Author's calculation from estimation result

The effect on FDI inflows of natural resource is positive in least developed countries ($\beta = 0.02$) and negative in developing countries ($\beta = -0.1$). This is evidence that foreign firms are motivated to undertake investment in least-developed countries for exploitation of natural resources. Countries which are endowed with richer natural resources can attract more foreign investment. However, it would not be the case with developing countries. As the level of development increases, countries are more concerned with the protection of natural resources. In the developing country group, countries with less natural resources can attract more FDI since they can offer other competitive advantages such as good levels of infrastructure and high skilled workforce that efficiency-seeking FDI is looking for.

In all countries, economic freedom plays as FDI stimulus factor ($\beta = 0.07$). Higher economic freedom results in an improvement in the business environment in terms of higher government integrity and lower prevalence of corruption, stronger legal system for safer investment climate, less regulations to free up business productivity and profitability, and more freedom for individuals and businesses in the labor market. Such favorable business environment would induce more foreign investment flowing to the country.

Economic globalization has a positive effect on FDI inflows, though the magnitude of the effect is different with least developed countries having a higher size effect ($\beta = 0.27$) compared to developing countries ($\beta = 0.13$). Economic globalization frees up international trade and investment which allows larger flows of goods and capital among countries. In developing countries, efficiency-seeking FDI is attracted to countries due to their good levels of infrastructure and high skilled workforce.

In their production chain, multinational firms are able to allocate different stages of production in different developing countries in order to exploit the country comparative advantages. Since different stages of production are allocated in different developing countries, output produced in one country can become input of the production process in another country. In each country, foreign firms need to import materials from overseas and export products abroad. This requires them to involve in lots of import and export activities across nations. For this reason, FDI favors countries with a high level of openness regarding to international trade. Free trade through the reduction of trade barriers will facilitate the movement of goods including inputs and output. In least developed countries, foreign investment may favor exploitation of natural resources or primary industries that require low level of technologies and less skilled labor. The exportation of natural resources may depend on the country's degree of trade freedom. Reductions in trade restrictions would make it easier for foreign firms to export their products and contribute significantly to the expansion of the country' exports.

The relationship between social globalization and FDI inflows is found to be negative ($\beta = -0.17$ for developing countries and $\beta = -0.05$ for least developed countries). Social globalization realizes its effect through the spread of ideas, information flows, and movement of people. Since deeper social globalization increases the rate of technology transfer, knowledge diffusion, and ideas exchange via personal contact and cultural proximity, domestic firms can gain more access to the world's stock of technologies. As a result, foreign firms may lose their advantages in superior technologies over domestic firms. Besides, there are types of products need to be consumed at the place where they are produced such as education or healthcare services. Domestic residents face with the choice between foreign services provided at home by foreign firms or abroad. Social globalization frees up the movement of people across borders. As more domestic residents are able to go abroad to seek for foreign education and healthcare, foreign investors have less incentive to build up their physical presence in the host country. The magnitude of the FDI effect of social globalization may depend on the country's absorption capability. Since developing countries are more capable in absorbing advanced technologies than least-developed countries, social globalization has a larger negative effect on FDI inflows in developing countries than in least-developed countries.

Political globalization plays as an impediment to inward FDI in all countries ($\beta = -0.16$ for developing countries and $\beta = -0.04$ for least developed countries). One possible explanation for the negative relation between political globalization and FDI inflows is that political globalization is characterized by a diffusion of cooperative government policies. With stronger political cooperation, a country would have more access to international aid and financial support. However, easier access to international financial borrowing causes the accumulation of the country's external debts. The overhang of higher external debts raises the country's risk which discourages foreign investors from undertaking investment in the country.

5 Conclusion

Good understanding of the determinants of FDI is important for it would help governments to provide effective measures for FDI attraction. Toward this end, the empirical study is conducted at the group of country level including developing and least developed countries. In all countries, economic growth plays as an FDI stimulus factor, and this provides a strong evidence of market-seeking FDI. High economic growth results in larger market size and rising demand which stimulate the inflow of FDI. Natural resources-seeking FDI is found in least developed countries where legal exploitation of natural resources lures foreign investors. Efficiency-seeking FDI is more evident in developing countries where good levels of infrastructure and quality of the labor force are FDI-driven factors. In all countries, financial development makes it easier for business firms to acquire external funds. This helps foreign firms to directly increase their business opportunities and also indirectly through the business expansion of local firms with whom foreign firms establish a business relationship. Foreign investors are concerned with the business environment in the host country. More business-friendly environment conducive for the development of the private business sector attracts more foreign investment. With respect to the country's degree of openness, while economic globalization has a positive effect on FDI inflows, social and political globalization show to be a drag in the inflow of FDI. Economic globalization frees up international trade which facilitates the movement of goods including inputs and output across countries. Multinational firms are more able to allocate different stages of production in different developing countries in order to exploit the country comparative advantages. Besides, less trade restrictions would make it easier for foreign firms to export natural resources from least developed countries. In contrast, higher social globalization increases the rate of technology transfer and knowledge diffusion via personal contact and cultural proximity which allows domestic firms to gain more access to the world's stock of technologies and thus weakens the advantage of foreign firms in superior technologies over domestic firms. Finally, stronger political cooperation would enable a country to have more access to the international financial source. However, the likely of higher external debts raises the country's risk and thus reduces the investment incentive for foreign investors.

Appendix: Estimation Result

Regression with Driscoll-Kraay standard errors	Number of obs	=	1933
Method: Pooled OLS	Number of groups	=	101
Group variable (i): Country	F(39, 19)	=	862,995.44

(continued)

(continued)

Maximum lag: 2				Prob > F	=	0.0000
				R-squared	=	0.2227
				Root MSE	=	6.0085
Drisc/Kraay						
FDI	Coef	Std. Err	*t*	*P* > *t*	[95% Conf. Interval]	
GDP	0.1451905	0.0650064	2.23	0.038	0.0091306	0.2812504
NAR	− 0.101055	0.0170187	− 5.94	0.000	− 0.1366755	− 0.0654345
POP	0.2691776	0.3253338	0.83	0.418	− 0.4117538	0.950109
QLF	7.858766	2.865029	2.74	0.013	1.862192	13.85534
URB	0.0568598	0.0091672	6.20	0.000	0.0376727	0.0760469
FIN	2.673074	1.070286	2.50	0.022	0.4329387	4.913209
EFR	0.0693888	0.0256548	2.70	0.014	0.0156926	0.123085
EGI	0.1250753	0.0211133	5.92	0.000	0.0808847	0.1692659
SGI	− 0.1746615	0.0443933	− 3.93	0.001	− 0.2675776	− 0.0817453
PGI	− 0.1644122	0.0342494	− 4.80	0.000	− 0.236097	− 0.0927274
DGDP	0.0497695	0.0547514	0.91	0.375	− 0.0648264	0.1643654
DNAR	0.1249063	0.0706231	1.77	0.093	− 0.0229096	0.2727222
DPOP	− 0.4913292	0.1945079	− 2.53	0.021	− 0.8984389	− 0.0842194
DQLF	− 23.8172	3.686166	− 6.46	0.000	− 31.53243	− 16.10196
DURB	− 0.0056559	0.0306146	− 0.18	0.855	− 0.069733	0.0584211
DFIN	22.64924	14.21523	1.59	0.128	− 7.10358	52.40205
DEFR	− 0.0708646	0.0550942	− 1.29	0.214	− 0.1861781	0.0444489
DEGI	0.1487772	0.0600209	2.48	0.023	0.023152	0.2744023
DSGI	0.1213403	0.0324793	3.74	0.001	0.0533604	0.1893202
DPGI	0.1263573	0.0387995	3.26	0.004	0.0451491	0.2075655
Year						
2000	0	(empty)				
2001	− 0.0554523	0.1363833	− 0.41	0.689	− 0.3409059	0.2300012
2002	0.1035832	0.165828	0.62	0.540	− 0.2434988	0.4506652
2003	0.0341557	0.0990158	0.34	0.734	− 0.1730867	0.2413981
2004	0.6022564	0.1377376	4.37	0.000	0.3139682	0.8905446
2005	1.602516	0.1723858	9.30	0.000	1.241708	1.963324
2006	2.398849	0.1874885	12.79	0.000	2.006431	2.791267
2007	2.85799	0.2184015	13.09	0.000	2.40087	3.31511
2008	3.529832	0.2813555	12.55	0.000	2.940949	4.118716
2009	2.848086	0.4178758	6.82	0.000	1.973462	3.72271
2010	3.661122	0.2709578	13.51	0.000	3.094001	4.228243
2011	4.588828	0.2935543	15.63	0.000	3.974412	5.203245

(continued)

(continued)

2012	4.295941	0.3227629	13.31	0.000	3.620391	4.971492
2013	3.621735	0.3459834	10.47	0.000	2.897583	4.345886
2014	3.165573	0.3603703	8.78	0.000	2.411309	3.919837
2015	3.640611	0.4422091	8.23	0.000	2.715056	4.566165
2016	2.497468	0.3983013	6.27	0.000	1.663813	3.331122
2017	3.22089	0.3865793	8.33	0.000	2.41177	4.03001
2018	2.733226	0.3865554	7.07	0.000	1.924157	3.542296
2019	2.391849	0.4000215	5.98	0.000	1.554594	3.229103
_cons	− 1.370504	3.771525	− 0.36	0.720	− 9.264398	6.523389

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