ANALYZING THE IMPACT OF INFLATION TARGETING ADOPTION ON FDI INFLOWS

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ABSTRACT

This paper is an empirical assessment of the impact of inflation-targeting adoption –as a monetary policy framework by central banks– on foreign direct investment (FDI) inflows.

Literature on international trade acknowledges the paramount role that FDI plays in fostering economic development and growth via integrating economies around the globe. Studies, such as OECD in 2014; UNCTAD in 2019, have shown that FDI acts as a catalyst for technological change, competition and expansion. These studies have also suggested that FDI is attracted to countries that exhibit good governance, low uncertainty and macroeconomic stability.

The literature on monetary policy on the other hand argues that inflation targeting (IT) – a monetary policy framework– mitigates uncertainty, enhances governance and brings macroeconomic stability to the adopting countries. Hence, it would seem that the IT-adoption should enable the adopting countries attract the largest FDI inflows. To verify this conjecture, this study performs a comparative analysis between the IT-adopting countries and the non-adopters in attracting FDI.

Using a panel of OECD and middle-income countries (MICs), the study employs the matching-estimation methodology, often used in assessing a treatment effect by comparing the before-and-after effects, such as a medical treatment at the micro-level, or a policy implementation at the macro-level. This comparison is two-staged: at first, the author estimates the FDI flows into OECD countries and MICs before and after the adoption of IT. At the second stage, the author then compares the difference between the FDI inflows among the IT-adopting countries and those who did not adopt IT. The empirical findings exhibit an interesting but contradicting pattern: when it comes to the OECD countries, the results show that the IT-adopters do better than the non-adopters in attracting the FDI inflows. According to these findings, the IT-adopting OECD countries have enjoyed a significant increase in the FDI inflows by about 3 ½ to 4 ½ percentage points compared to the non-IT OECD countries.

For the middle-income countries, however, the IT-adoption appears to have an adverse effect on FDI inflows: a significant reduction in the FDI inflows is witnessed among the IT-adopters compared to their counterparts: The MICs that adopted inflation targeting have suffered a significant reduction in the FDI inflows by about 2 to 3 percentage points as compared to the non-IT adopting MICs.

The author also performed numerous robustness checks to verify the empirical findings. The study's results seem to be robust to the post-estimation sensitivity tests recommended for such empirical analysis, including the Rosenbaum sensitivity test.

Keywords: Monetary Policy, Inflation Targeting, Foreign Direct Investment, Governance.

INTRODUCTION

The beneficial role of foreign investment for economic development and growth sustainability has been well established and acknowledged. The importance of this role has become even more visible in light of the historical freedom that foreign investment has enjoyed in its mobility over the past few decades. According to OECD (2014), foreign investment, particularly foreign direct investment (FDI) has been acting as a catalyst for technological change, competition and expansion. The FDI flows play a paramount role in fostering economic development and growth by integrating economies around the globe.

In the recent past, there has been an upward trend in the FDI flows, where countries in every category – advanced, emerging and developing – have enjoyed increased FDI inflows. The global stock of FDI in 2018 reached $33.24 trillion (about 39% of the world's GDP) while the FDI flows in 2018 were estimated to have reached $2.87 trillion. Given this upward trend in the FDI flows and the freedom of cross-border mobility, a rigorous competition has emerged among countries to attract FDI. This competition has granted the foreign investors the luxury to select a low-risk-high-return environment for their investments. According to the literature, the key determinants of a low-risk-high-return environment in the eyes of the foreign investors are good governance, less uncertainty, and macroeconomic stability. The policymakers, therefore, are keen to design macroeconomic policies that signal their commitment to fostering governance, mitigating uncertainty and safeguarding macroeconomic stability.

A voluminous literature has attempted to discuss both the concerns of foreign investors and the different approaches that policymakers have taken to downplay those concerns. One of these approaches is inflation targeting (IT), a monetary-policy framework. IT has garnered an outstanding tribute for mitigating uncertainty, enhancing the governance institutions and bringing the overall macroeconomic stability to the adopting countries. These are precisely the conditions best suited for FDI in a recipient country. Thus, there seems to be a nexus between FDI and inflation targeting. This apparent nexus leads us to conjecture that the IT-adoption is conducive to FDI. The author attempts to test the validity of this conjecture by empirically investigating the performance of the IT-adopting countries in attracting FDI, and then comparing them to those countries that have not adopted inflation targeting.

As a consequence, the rest of the paper is organized as follows. Firstly, offers a detailed discussion of FDI, its advantages and disadvantages, the theory behind FDI and the determinants of FDI. Secondly, offers a brief discussion on monetary policy and inflation targeting, thus building on the previous section to identify some of the apparent linking features between FDI and IT, in an attempt to find the nexus between the two and formalize the earlier conjecture. Thirdly describes the data and methodology used in this study. Fourthly, presents and analyzes the empirical results and the robustness checks. Lastly, concludes the study.

Foreign Direct Investment (FDI)

Of all the capital flows across international borders, the most preferred flows from the standpoint of policymakers are FDI inflows. This preference stems from the fact that during economic and financial crises, FDI has demonstrated its resilience as opposed to the other types of capital flows, such as foreign portfolio investment (FPI) and the sovereign debt investments. For example, during the two notorious crises – the Mexican debt crisis and the Asian currency crisis – it was observed that the sudden fleeing of FPI exacerbated these crises.

There are numerous advantages associated with FDI (Dunning & Lundan, 2008): A new entry in a domestic market in the form of FDI creates a competitive environment that enhances efficiency and productivity. FDI is well known for transferring new technology and innovative capabilities to the recipient economy, and thus boosting productivity, either by hiring domestic labor and training them or through spill-over effects by doing business with the domestic suppliers. The multinational corporations (MNCs) trade with their affiliates and existing customers in either home country or in other countries, creating more opportunities for exports of the recipient economy.

FDI also has some disadvantages summarized by Williams & Williams (1999): FDI can have a *"crowding out"* effect on domestic private investment and may discourage new market entrants. The recipient country may lose a substantial amount of revenues because of the incentive packages offered to FDI. In countries where distortions exist – both in financial and trade sectors – FDI may take advantage of these distortions, so that these additional distortions will cost more to the recipient country than the FDI's benefits.

The FDI decisions involve not only the investing firm's objectives, of profit-maximization and cost-minimization, but they also involve the host-country's objectives, such as socio-economic welfare-maximization. Modeling of the FDI decisions, therefore, becomes quite a complex task, and this complexity makes a unified formal work on FDI nearly impossible. Most of the formal literature on FDI, therefore, takes two major approaches: the firm's approach and the country's approach. The theoretical models of the firm's approach build on the microeconomic production theory, while the country's approach utilizes the macroeconomic trade theory.

The seminal work of Dunning & Lundan (2008) provides a comprehensive analysis of the three mainstream theories on FDI that have applied the microeconomic approach or the Micro-Theory of FDI: The industrial organization (IO) theory, the product life cycle (PLC) theory, and the internalization theory. As for the Macro-Theory of FDI, prior to 1960s, there were two dominant neo-classical approaches to theorize the foreign investment decisions: First, the international capital movements are a function of interest rates differentials; second, the firms invest abroad due to the factor endowments differentials leading to either absolute or comparative advantages in costs and benefits of production. The workings of these two approaches can be seen in the Heckscher-Ohlin model that represents the neo-classical traditional theory of foreign investment.

Some theorists have tried to synthesize the two aspects of FDI into a Unified (Micro-Macro) Theory of FDI: (Kojima & Ozawa, 1984) present their formal analysis, dubbed as *"Kojima model"*, which asserts that there is a complementarity among FDI and international trade: A country that has a comparative advantage in a given sector is matched up with another country that has a comparative disadvantage in the same sector. As a result, this match attracts FDI from the disadvantaged to the advantaged country. The complementarity of FDI and international trade triggers the dynamics of gains for all the parties involved (a win-win situation).

A balanced view of the Unified Theory on FDI is presented in Dunning & Lundan (2008), who has amalgamated the features of the mainstream theories on FDI in a single paradigm called *"the eclectic paradigm"*, which is also referred to as the *"OLI paradigm"*. The *eclectic* or the *OLI* paradigm asserts that FDI is a function of OLI advantages that a firm or a country has, where *"O"* refers to the ownership advantages, *"L"* refers to the location, and *"I"* refers to the internalization advantages. After a detailed discussion of *"the eclectic paradigm"*, Dunning& Lundan (2008) concludes that the FDI decisions are made in the search of one or

more of the six factors: natural resources, market, efficiency, strategic assets, trade and distribution, and support services.

The Determinants of FDI

A complete list of FDI determinants is too long to accommodate here. But since the focus of this study is a country's attractiveness for the inward FDI, I limit my analysis to the country-specific determinants widely used in the literature, and I provide a theoretical justification for the inclusion of the covariates in my econometric model.

(i)   Growth

The potential expansion in the market of a recipient country, and to some extent the region as well, is considered as the most prominent determinant of FDI. A well-documented empirical literature shows a significant positive relationship of this determinant. In my econometric model, I use per capita GDP growth as a proxy for this determinant.

(ii)   Labor Force

The second prominent determinant of FDI, following the growth, is the labor force, both raw and skilled labor. To gauge this determinant, different studies have used different variables, such as wages, size of the working-age labor force, unemployment rates, education levels, etc. Due to the data-availability constraint for certain countries in my data sample, I use the size of the labor force.

(iii)   Country's Openness

FDI is often directed at the import-substitution industries (ISI), and the lion-share of FDI goes to the globally traded intermediate and final goods. Therefore, trade openness should have a significant impact on FDI. Additionally, the investors tend to prefer financial openness as well, in the form of minimum barriers to the capital flows. Hence, it is a plausible assumption that the trade and financial openness will have a significant impact on FDI. I, therefore, use the ratio of imports and exports to GDP as a proxy for the trade openness. As for the financial openness, I use the financial index of Chin & Ito (2006).

(iv)   The Currency Stability

Following the Aliber's weak currency hypothesis, numerous empirical studies on FDI have included exchange rate in their econometric model and have found significant relationship between the two. For example, Edwards (1990) finds a significant and positive impact of a recipient country's exchange rate on the FDI inflows. I use PPP-based exchange rate to proxy for the currency stability.

(v)   Taxation

Many studies have analyzed the impact of tax rates in the recipient country on FDI. Some of these studies, such as Billington (1999), find a significant effect of tax rates on the FDI inflows. I use the rates of corporate income tax, personal income tax and value added tax.

(vi)   Inflation

A stable price level of the recipient country is another important determinant of FDI. A vast majority of the empirical literature on FDI includes a measure of changes in the price level (mainly CPI) and finds a significant negative relationship between the two. Since one of the benefits of inflation targeting – as a monetary policy framework – is a low and a stable inflation, the IT-adoption should implicitly have a significant positive impact on the FDI inflows. I, therefore, include in the covariate matrix the CPI inflation. Subsequently, I also use an alternative measure of inflation, the GDP deflator, to check for the robustness of the results.

(vii)   Governance

In general, the overall quality of governance has been cited by the literature as an important determinant of FDI, particularly since the governance is a catalyst for political stability. As for the proxy for governance, there are many different indices available that have been used in the literature. I use a comprehensive index, which I have constructed as a mean average of the six worldwide governance indicators developed by Kraay et al. (2010).

FDI and the Monetary Policy of Inflation Targeting

One factor that seems to bond the two together is macroeconomic stability in a recipient country. Proponents of inflation targeting passionately argue that IT mitigates uncertainty and brings overall macroeconomic stability to the adopting country. For example, Svensson (1997); Mishkin (1999) and Bernanke et al. (2018) credit IT for enabling the public and the markets to evaluate the credibility of policymakers and hold them accountable for their commitments. They also praise IT for explicitly defining objectives, greater transparency, and enhanced accountability; and mitigating the *"pass through"* effects of unexpected shocks and keeping the nominal interest rates stable. Several other benefits have been also attributed to the inflation-targeting regime as well: IT rejuvenates the motivations for institutional reforms; IT reduces uncertainty and the confusion over the policy stance; IT builds and lends credibility to policymakers; and IT has *"state of the art"* nature, which helps combat the uncertainty, thus enhancing macroeconomic stability.

There are a handful of studies on the impact of monetary policy on FDI inflows, perhaps because any monetary-policy framework (inflation targeting in this case) is considered to be inward-looking. Kopits (2001) provides an early analysis of the important role played by the government institutions in the success or failure of macroeconomic policies. He first analyzes the fiscal reforms adopted by advanced and emerging economies to lend credibility to their fiscal policy regime. He then compares these reforms to those necessary for the adoption of an inflation-targeting regime. He suggests that the recent fiscal rules can serve as a useful policy framework, particularly for countries that lack credibility, and wish to adopt the inflation-targeting regime.

DATA AND METHODOLOGY

I use panel data with the annual time series covering 90 countries over a period of 18 years from 1996 to 2013. I call this 90-country panel data the *"Grand Sample",* which is further clustered into two sub-samples: the OECD sample, including 34 OECD member countries: 16 of

them have adopted inflation-targeting, while the remaining 18 countries are non-IT adopters (Table 1). The OECD countries are classified as high-income countries (HICs) except for three of them – Hungary, Mexico and Turkey – which are classified as middle-income countries (MICs). The second clustered sample *"MICs Sample"* contains 59 middle-income countries: 17 have adopted IT, and the remaining 42 MICs are non-IT adopters. For the MIC sample, income-based classification is plausible because development-based classification often ignores income-level differences, which may violate the *"selection on observables"* assumption (imbalance in the observed confounders).

More importantly, this study also includes in its covariate matrix an index of the worldwide governance indicators. Since the quality of governance institutions plays a key role in the outcome of any policy implementation, the inclusion of a proxy for such quality would satisfy the often-violated assumption of *"selection on non-observables"* (imbalance due to non-observed confounders, such as institutional quality). The major sources of the data are Heston et al. (2012), the World Bank's world development indicators (WDIs), the worldwide governance indicators (WGIs), the international financial statistics (IFS), and the world economic outlook (WEO) as well as the Fiscal Affairs Department of the IMF. I also use the Chinn & Ito (2006) index to proxy for financial openness. There are two time horizons in the sample: the inclusive time horizon of an 18-year period from 1996 to 2013, and a truncated time horizon of a 13-year period from 2001 to 2013. The justification for this truncation is two-fold: First, a majority of MICs joined the IT-club at the beginning of 21st century.

Table 1		
THE VARIABLES WITH THEIR DEFINITIONS		
Variable	**Description**	**Source**
Inflation Targeting (IT)	Binary variable used as dummy for inflation targeting, equals 1 for the years when a country has had IT in place, and 0 otherwise.	Gemayel et al. (2011) and Roger (2009) and the websites of various central banks and the IMF.
FDI Inflows CPI Inflation	Foreign direct investment net inflows (as % of GDP). Annual percentage change in the consumer price index (using Laspeyres method).	IMF, IFS and Balance of Payments, World Bank and OECD. World Development Indicators, The World Bank (Last Updated: 03/12/2015).
Output Growth	Annual growth rate of GDP at market prices based on constant 2005 U.S. dollars.	World Bank national accounts data, and OECD National Accounts data files.
Work Force	The total population aged 15-64 (% of total population, ILO estimates).	The United Nations Population Division's World Population Prospects.
Financial Openness	The Chinn & Ito (2006) index for the openness in capital accounts transactions.	Chinn & Ito (2006).
PPP Exchange Rate	Price level ratio of PPP conversion factor (GDP) to market exchange rate.	World Bank, International Comparison Program database.
Trade Openness	Total exports and imports as a % of GDP.	World Bank/OECD National Accounts.
Corporate Income Tax	The percentage rate of corporate income tax officially reported to the IMF.	International Monetary Fund, Fiscal Affairs Department database.
Personal Income Tax Value Added Tax	The percentage rate of personal income tax reported to the IMF. Tax rate on goods and services (% value added of industry and services) reported to the IMF.	International Monetary Fund, Fiscal Affairs Department database. International Monetary Fund, Fiscal Affairs Department database.
GDP Deflator	Annual growth rate of the GDP implicit deflator.	World Bank/OECD National Accounts.

Second, during the 1990s, a number of financial crises must have had some impact on FDI. The time stratification enables me to check for any bias stemming from the impact of these crises. Please note that the work on this research project had begun in 2015, so the latest data availability at the time was until the 2013 year-end.

As for the estimation methodology, this study employs the treatment-effects matching estimation. I use various categories of two matching estimators: the propensity-score matching and the nearest-neighbour matching. I also test the robustness of these estimators by applying a large sample bias correction and a regression adjustment through inverse-probability weighting.

Moreover, two additional robustness checks are also performed: First, the sample-related robustness checks are performed, such as the exclusion of outlier observations, using an alternative specification of inflation, and truncating the sample's time horizon to account for abnormal shocks. Second, and more importantly, the data-related and the methodology-related robustness checks are performed, such as the post-estimation tests. In this vein, I test for the unobserved heterogeneity using the Rosenbaum sensitivity analysis tests. I also check for the satisfaction of the two key assumptions: the overlap assumption and the common support assumption.

RESULTS AND ANALYSIS

The Grand Sample

Table 2 THE TREATMENT EFFECTS (ATET) ON FDI INFLOWS FOR THE GRAND SAMPLE						
Estimator → **Model ↓**	**Propensity Score Matching (PSM)**		**Nearest Neighbor Matching (NNM)**		**Regression Adjustment**	
	Single Match	**Multiple Matches**	**Narrow Radius**	**Wide Radius**	**Bias Adj.**	**Reg. Adj.**
Inclusive Sample	0.0294* (0.0157)	0.0286* (0.0156)	0.0253* (0.0157)	0.0244 (0.0157)	0.0268* (0.0158)	0.0275* (0.016)
No CPI > 100 %	0.0294* (0.0157)	0.0286* (0.0156)	0.0260* (0.0158)	0.0245 (0.0157)	0.0261* (0.0158)	0.0275* (0.016)
No CPI > 50 %	0.0274* (0.0158)	0.0274* (0.0158)	0.0264* (0.0157)	0.0250 (0.0157)	0.0270* (0.0157)	0.0275* (0.016)
No CPI > 25 %	0.0269* (0.0159)	0.0273* (0.0157)	0.0264* (0.0158)	0.0250 (0.0157)	0.0262* (0.0158)	0.0275* (0.016)
Truncated Sample	0.0345* (0.0188)	0.0296* (0.0174)	0.0316* (0.0171)	0.0297* (.00171)	0.0314* (0.0171)	0.0339** (0.018)
No CPI > 100 %	0.0345* (.0188)	0.0296* (0.0174)	0.0316* (.0171)	0.0297* (.0171)	0.0314* (.0171)	0.0339** (.018)
No CPI > 50 %	.0351* (.0186)	.0319* (.0174)	.0313* (.0171)	.0291* (.0171)	.0307* (.0172)	.0342** (.018)
No CPI > 25 %	.0352** (.019)	.0299* (.0175)	.0313* (.0171)	.0295* (.0171)	.0307* (.0172)	.0343** (.018)
Coefficients are for FDI Inflows (Dependent Variable). Independent Variables are CPI inflation, Output Growth, Financial Openness, Trade, PPP Exchange Rate, CIT, PIT, VAT and the Overall Institutional Quality. Treatment Variable is Inflation Targeting Regime (ITR) Dummy.						
Asterisks next to the coefficients (*, **, ***) represent their significance levels of 10%, 5%, and 1% respectively. Figures listed in parenthesis are Robust Standard Errors. *"Inclusive Sample"* covers 18 years from 1996-2013 while the *"Truncated Sample"* covers 13 years from 2001-2013.						

The results in Table 2 paint an encouraging picture for the IT-adoption. The coefficients for the inclusive sample (the first row) are all positive and significant at the 90% confidence level. IT-adoption appears to have helped the adopters increase the FDI inflows by about two to three percentage points as compared to the non-adopters. These results remain about the same when we drop the outlier observations where the CPI inflation is higher than 100%, 50% and 25%. However, the coefficients for the truncated sample – rows 5 to 8 – show even a better performance: the IT-adoption has helped the adopting countries increase the FDI inflows by about 3 ½ percentage points more than their counterparts, the non-adopting countries.

The results in Table 2 would imply that inflation targeting is conducive to FDI since IT enhances macroeconomic stability. But without further investigation, these results may be misleading due to the heterogeneity of the sample: the high and middle-income countries grouped together. I, therefore, cluster this *"Grand Sample"* into two sub-groups, OECD and MICs, as explained in the previous section of *"Data and Methodology"*.

The OECD Sample

Table 3 presents the treatment effects of IT-adoption on attracting FDI inflows for the first sub-sample, the OECD countries. All coefficients are positive and a vast majority of them are significant, implying that the OECD countries that adopted IT have outperformed their counterparts in attracting FDI over the sample time period: An increase in the FDI inflows by 3 ½ to 4 ½ percentage points, more than the non-IT OECD countries during the same time period, can be deduced from these results.

Table 3 THE TREATMENT EFFECTS (ATET) ON FDI INFLOWS FOR THE OECE SAMPLE						
Estimator → **Model ↓**	**Propensity Score Matching (PSM)**		**Nearest Neighbor Matching (NNM)**		**Regression Adjustment**	
	Single Match	**Multiple Matches**	**Narrow Radius**	**Wide Radius**	**Bias Adj.**	**Reg. Adj.**
Inclusive Sample	0.0350* (0.0212)	0.0346* (0.0211)	0.0358* (0.0209)	0.0350* (0.0207)	0.0376* (0.0212)	0.0479* (0.0253)
No CPI>100 %	0.0350* (0.0212)	0.0346* (0.0211)	0.0358* (0.0209)	0.0350* (0.0207)	0.0376* (0.0212)	0.0479* (0.0253)
No CPI > 50 %	0.0354* (0.0212)	0.0347* (0.0211)	0.0363* (0.0208)	0.0318 (0.0209)	0.0377* (0.0211)	0.0479* (0.0253)
No MICs	0.0301 (0.0241)	0.0319 (0.0241)	0.0381 (0.0242)	0.0393* (0.0242)	0.0403* (0.0245)	0.0534** (0.0276)
Truncated Sample	0.0415* (0.0251)	0.0334 (0.0248)	0.0448* (0.0239)	0.0398* (0.0239)	0.0344 (0.0240)	0.0609** (0.0291)
No CPI>100 %	0.0415* (0.0251)	0.0334 (0.0248)	0.0448* (0.0239)	0.0398* (0.0239)	0.0344 (0.0240)	0.0609** (0.0291)
No CPI > 50 %	0.0375 (0.0252)	0.0339 (0.0249)	0.0445* (0.0239)	0.0402* (0.0239)	0.0277 (0.0240)	0.0609** (0.0291)
No MICs	0.0205 (0.0293)	0.0293 (0.0288)	0.0476* (0.0287)	0.0474* (0.0287)	0.0363 (0.0288)	0.0646** (0.0323)
Coefficients are for FDI Inflows (Dependent Variable). Independent Variables are CPI inflation, Output Growth, Financial Openness, Trade, PPP Exchange Rate, CIT, PIT, VAT and the Overall Institutional Quality. Treatment Variable is Inflation Targeting Regime (ITR) Dummy.						
The asterisks next to the coefficients (*, **, ***) represent their significance levels of 10%, 5%, and 1% respectively. Figures listed in parenthesis are Robust Standard Errors. *"Inclusive Sample"* covers 18 years (1996-2013); *"Truncated Sample"* covers 13 years (2001-2013).						

The MICs Sample

Table 4 presents the treatment effects of IT-adoption among the second sub-sample, the middle-income countries (MICs) on attracting FDI. One clear contrast in these results, as opposed to what has been observed earlier in Table 3, is the negative sign attached to all the coefficients across the various estimators. For the *"MIC Sample"* (rows 1 to 4 in Table 4), it appears that IT-adoption has had an adverse effect on the FDI inflows, which saw a reduction of about 2 to 3 percentage points among the IT-adopting MICs compared to the non-adopting MICs. This adverse effect is consistent across different model specifications, though losing statistical significance at times.

Estimator → Model ↓	Propensity Score Matching (PSM)		Nearest Neighbor Matching (NNM)		Regression Adjustment	
	Single Match	**Multiple Matches**	**Narrow Radius**	**Wide Radius**	**Bias Adj.**	**Reg. Adj.**
Inclus. Sample	-0.0278** (0.0132)	-0.0001836	-0.0003132	-0.0239** (0.0114)	-0.0233** (0.0118)	-0.0001368
No CPI > 100 %	-0.0278** (0.0132)	-0.0001836	-0.0214 (0.0156)	-0.0267** (0.0124)	-0.0002997	-0.0189** (0.0094)
No CPI > 50 %	-0.000234	-0.0145 (0.0103)	-0.00038556	-0.0290** (0.0125)	-0.0318*** (0.0126)	-0.0183** (0.0092)
No OECD	-0.0073 (0.0095)	-0.0098 (0.0083)	-0.0236 (0.0162)	-0.0003624	-0.0450*** (0.0142)	-0.0080 (0.0074)
Trunc0. Sample	-0.000587	-0.0153 (0.0111)	-0.0057 (0.0141)	-0.0085 (0.0096)	-0.0001546	-0.0103 (0.0090)
No CPI > 100 %	-0.000587	-0.0153 (0.0111)	-0.0057 (0.0141)	-0.0085 (0.0096)	-0.0001546	-0.0103 (0.0090)
No CPI > 50 %	-0.0335** (0.0171)	-0.0147 (0.0097)	-0.0041 (0.0140)	-0.0068 (0.0098)	-0.0148 (0.0098)	-0.0094 (0.0089)
No OECD	-0.0021 (0.0079)	-0.0052 (0.0074)	-0.0068 (0.0102)	-0.0033 (0.0097)	-0.0223** (0.0107)	-0.0058 (0.0064)

<p align="center">Table 4
THE TREATMENT EFFECTS (ATET) ON FDI INFLOWS FOR THE MIC SAMPLE</p>

Coefficients are for FDI Inflows (Dependent Variable). Independent Variables are CPI inflation, Output Growth, Financial Openness, Trade, PPP Exchange Rate, CIT, PIT, VAT and the Overall Institutional Quality. Treatment Variable is Inflation Targeting Regime (ITR) Dummy.

The asterisks next to the coefficients (*, **, ***) represent their significance levels of 10%, 5%, and 1% respectively. Figures listed in parenthesis are Robust Standard Errors. *"Inclusive Sample"* covers 18 years (1996-2013); *"Truncated Sample"* covers 13 years (2001-2013).

Robustness Checks

To see whether the data samples used in the regressions satisfy the key assumptions, I conduct the Rosenbaum sensitivity test as well the tests for the overlap and common support assumptions suggested for these kinds of empirical analyses. I find that the upper and lower bounds are all significant at 5% and 10% confidence intervals. These findings confirm that the data samples are robust according to the Rosenbaum bounds tests, and there is no estimation bias due to the unobserved factors.

CONCLUDING REMARKS

The beneficial role of FDI for development and growth has been recognized by the literature. It has also been acknowledged that FDI is attracted to countries with better governance, greater macroeconomic stability and the least uncertainty. Monetary economists who favor inflation targeting, as a policy framework, believe that what attracts FDI – namely good governance, lower uncertainty and greater macroeconomic stability – can be achieved through adopting inflation targeting. Hence, one can conjecture that the IT-adopting countries should be the most successful in attracting FDI. Indeed, the initial look at a broader picture, the *"Grand Sample"* confirms that IT-adoption has helped the adopting countries increase the FDI inflows by about 3 percentage points as compared to the non-IT adopters.

However, a closer look reveals these findings to be misleading when the *"Grand Sample"* is clustered into two sub-samples: separating high-income countries from the middle-income countries. Surprisingly, the results for the clustered samples exhibit a contradicting pattern. Among the high-income countries, the results are in favor of the IT-adoption: the IT-adopting OECD countries have enjoyed a significant increase in the FDI inflows by about 3 ½ to 4 ½ percentage points compared to the non-IT OECD countries. Whereas, among the middle-income countries, the results paint a grim picture of the IT-adoption: The MICs that adopted inflation targeting have suffered a significant reduction in the FDI inflows by about 2 to 3 percentage points as compared to the non-IT adopting MICs.

One suspect behind these contradictory outcomes of the same policy regime may be the fact that the MICs simply do not have the quality institutional settings needed to successfully implement inflation targeting, which might have helped their richer counterparts, the OECD group, in reaping the benefits of inflation targeting.

Nonetheless, caution must prevail when interpreting these results since they are obtained from panel regressions – which are known for imperfections. Perhaps, a case-study approach to further verify these findings among the IT-adopters should give a clear verdict on the effectiveness of inflation targeting in attracting or distracting FDI. The findings do, however, vindicate the stance of those who negate the *"one-size-fits-all"* approach, and advocate for the provision of good quality institutions prior to the IT-adoption.

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