Which business cycle matters for dividends from foreign direct investments?

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Abstract

This paper aims to shed light on the determinants of dividends arising from foreign direct investment (FDI), with a particular focus on the role of the business cycle in the investor's home country – a factor that remains relatively underexplored in the literature. We use the Eurostat bilateral data on dividends and the stock of the foreign direct investment. Additionally, we calculate business cycle indicators for both reporting and partner countries. To test our hypothesis that the investor country's business cycle significantly influences dividend payments, we apply panel data models that account for both cross-country and temporal variation.

Keywords: Dividends, foreign direct investment, business cycle, European Union

The functioning of an enterprise in the era of globalization involves not only the pursuit of its core business activities but also the undertaking of investment initiatives aimed at two primary objectives: meeting the expectations of increasingly demanding customers and, as noted by M.E. Porter, achieving a competitive advantage – considered the cornerstone of operations in a competitive market. Porter further emphasized that competitive advantage is a key driver of a company's performance.

Similarly, P. Pottem identified several sources of such advantage, including technological superiority (such as lower production costs or the introduction of innovative products that address existing or emerging consumer needs), marketing advantage, and managerial excellence (i.e., the adoption of modern, proven practices from parent companies). Other sources include financial advantage (e.g., access to cheaper external funding through intra-group loans) and privileged access to factors of production, such as a highly skilled workforce or low-cost resources.

In striving to achieve this essential element of any corporate development strategy – namely, sustainable competitive advantage—companies focus on both tangible resources (e.g., capital acquisition for business growth and investment) and intangible assets (e.g., know-how, skills, and experience). In the academic literature, Foreign Direct Investment (FDI) is recognized as playing a significant role in addressing capital shortages and facilitating access to new technologies.

The standard definition of foreign direct investment (FDI – classified as one of the five functional categories that form the foundation for recording financial transactions, income, and positions in international accounts – has been established in international statistical frameworks such as the *IMF's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6)* and the *OECD's Benchmark Definition of Foreign Direct Investment, Fourth Edition (BD4)*. These two manuals constitute a comprehensive set of principles designed to improve the statistical measurement of FDI and ensure consistent treatment of such investments across different countries and economies.

To align statistical indicators with the evolving financial and economic landscape, international organizations such as the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD) continuously issue recommendations that update or expand existing standards. At the time of writing, work is underway on the seventh edition of the *Balance of Payments and International Investment Position Manual* and the fifth edition of the *Benchmark Definition of Foreign Direct Investment*.

According to the IMF, foreign direct investment (FDI) is defined as a category of cross-border investment carried out by a resident of one economy (referred to as the direct investor, DI) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise, DIE) that is a resident of an economy other than that of the direct investor. The primary purpose of such an investment is to maintain a long-term relationship with the DIE, enabling the investor to exert a significant degree of influence over its management.

International standards define "lasting interest" as a situation in which the DI, either directly or indirectly – alone or in conjunction with other entities under its control – holds at least 10% of the voting power in the governing body of the DIE. Among compilers of FDI statistics, there is ongoing debate regarding the appropriateness of this 10% threshold. On one hand, it has been observed that in some cases a DI holding 10% of the voting rights may not exert meaningful or sustained influence over the enterprise. On the other hand, there are instances where an investor with a stake below the 10% threshold may nonetheless have effective and significant decision-making power. Nevertheless, current methodology continues to endorse the strict application of the 10% benchmark, as it facilitates the identification and delineation of the scope and nature of direct investment relationships.

According to international standards outlined in BD4, the primary components of FDI financial instruments are equity instruments and debt instruments. These components are involved in all transactions and positions between residents and non-residents belonging to the same corporate group. The measurement of foreign direct investment, in turn, is based on positions, transactions, and income related to FDI activity.

This article focuses on reinvested earnings as a component of foreign direct investment (FDI) – specifically within the context of the transactions account (reinvestment of earnings) and the income account (reinvested earnings). According to international statistical standards outlined in the OECD's benchmark manual, reinvested earnings from FDI are defined as the profits earned by direct investment enterprises (DIEs) during a given year, minus the dividends declared in the same period.

These reinvested earnings can be either positive or negative. A negative value typically arises in one of two situations: either when the enterprise declares dividends exceeding the profits earned in that year, or when the firm incurs a loss from its current operations.

In international statistics – particularly in the balance of payments, the international investment position, and foreign direct investment (FDI) statistics – reinvested earnings are treated both as income earned by foreign investors on their invested capital and as financial flows between residents and non-residents classified as affiliated entities.

In Poland, as well as other OECD economies, reinvested earnings from FDI play a significant role from both an income and a transactional perspective. They represent one of the primary sources of foreign capital inflows to these countries and are distinguished by their stability and low volatility compared to other FDI transaction components (FDI in the first half of 2023).

The notable role of reinvested earnings may indicate that direct investors continue to perceive investment opportunities for their direct investment enterprises (DIEs). As a result, they are inclined to

reinvest larger amounts into their subsidiaries – through not only fresh equity or debt capital injections but especially via retained profits that have not been distributed as dividends.

As highlighted by UNCTAD in the World Investment Report 2023, the dominant role of reinvested earnings in global FDI flows in 2022 stemmed from the sustained high profitability of major multinational corporations, particularly those operating in the extractive industries.

Table 1. Descriptive statistics of the variables used in the analysis

Variable	Obs	Mean	Std.Dev.	Min	Max
Dividends/FDI	23,567	0.0372	0.1780	-3	5.7925
Cycle reporter	67,602	-0.0857	1.2117	-5.5985	4.5553
Cycle partner	60,052	-0.0812	1.1952	-5.5985	5.0343

We decided to use the following baseline specification to establish the relationship between dividends and the reporter's and partner's business cycles

$$dividends/FDI_{i,j,t} = \beta_1 cycle_{i,t} + \beta_2 cycle_{j,t} + u_i + \varepsilon_{i,j,t}.$$

Table 2. Results for models for dividends from foreign direct investments

	(1)	(2)	(3)	(4)
Reporter's cycle	0.0118**	0.0096**		0.0119**
	(0.0045)	(0.0035)		(0.0045)
Partner's cycle	-0.0091*			-0.0073
	(0.0045)			(0.0038)
Partner's cycle [t-1]		-0.0070*	-0.0090*	-0.0021
		(0.0035)	(0.0043)	(0.0014)
Reporter's cycle [t-1]			0.0110**	
			(0.0042)	
Constant	0.0379***	0.0375***	0.0380***	0.0378***
	(0.0001)	(0.0001)	(0.0002)	(0.0001)
F	5.1586	5.1942	5.1743	3.5306
p-value for the F test stat.	0.0060	0.0058	0.0059	0.0147
Observations	23415	23415	23415	23415
Reporter-partner pairs	619	619	619	619
Log-likelihood	9293.0571	9286.5526	9286.4388	9293.8365

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Appendix

Table A1. Details of the variables used in the article

Variable	Description	Source
Dividends/FDI	The dependent variable. It was calculated as a ratio of dividends and stock of FDI. The variable was the moving average of	Own calculations
Dividends	Each observation stands for the quarterly value of dividends paid out by residents of the partner country to residents of the reporting economy. Specifically, the variable is defined in Eurostat's database as primary income: Direct Investment, equity, dividends, withdrawals from income of quasi-corporations and income distributed to investment fund shareholders (excluding RIE). In Eurostat's database, the variable is denoted as [D42S__D__F5]. The variable originates from the balance of payments statistics compiled according to the Balance of Payments Manual, Sixth Edition (BPM6). The variable's unit was millions of euros. The reference sector was the total economy for both the partner and the reporter.	Eurostat: [bop_c6_q]
Foreign Direct Investments (FDI)	The value of stocks of foreign direct investments originates in the Eurostat's International Investment Position database. The data was quarterly, denominated in million euros. According to ESA2010, reporter and partner sectors were the total economy (S1). The data covered assets at the end of the period.	Eurostat: [bop_iip6_q]
Reporter's business cycle and Partner's business cycle	The information on the state of the economy was quantified by business cycle indicators. We employed the Hamilton filter (Hamilton, 2018) to extract the cyclical components of the quarterly GDP time series. The business cycle indicators were standardized, that is divided by their standard error.	Own calculations
Gross Domestic Product	The base for the business cycle indicators extraction was the quarterly Gross Domestic Product time series. Specifically, it was the GDP at current prices, million euro (CP_MEUR). Each series was seasonally- and calendar-adjusted (SCA). The quality of business cycle indicators derived by filtering relies on the number of observations of the filtered time series. For this reason, we decided to calculate the indicators using as much data as it was possible. While downloading the data, we selected the maximal time range, that is 1975Q1 – 2023Q4. Obviously, the dataset was unbalanced.	Eurostat: [namq_10_gdp]