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Over the past six decades, equity stakes in emerging market infrastructure ventures backed by the International Finance Corporation—which fosters economic development by investing in private enterprises—delivered higher returns, on average, than investments in portfolios of publicly-listed equities.

Financial Returns on Equity Investments *in* Infrastructure *in* Emerging Markets *and* Developing Economies

Boosting economic growth and creating more good jobs in emerging market and developing economies requires significant investment, particularly in infrastructure, financed from both domestic and international sources. In view of reduced fiscal space and the need for private sector expertise, many policymakers want to mobilize private capital to finance such investments. Some investors, however, may be reluctant to commit resources to projects in developing economies for which information on the track record of past investments is less readily available than for their advanced economy counterparts.

In this study, we report key statistics on the financial returns associated with the International Finance Corporation's equity investments in developing economies. We focus on infrastructure for two reasons. The first, grounded in economic theory, is that beyond financial returns for the individual investor, in capital-scarce developing economies infrastructure has the potential to drive significant developmental gains or social returns for the recipient country overall (Gardner and Henry, 2023). The second reason, more relevant from the perspective of financial returns, is that infrastructure investments are often perceived as especially risky, particularly during the construction phase which can take several years and is prone to delays and cost overruns (Hendrata et al., 2025). Investors are also wary of potential regulatory changes that may impact profitability, especially in developing countries where policy and institutional uncertainty may be higher.

Empirical results from our analysis of the full sample of all IFC equity investments suggest that a diversified portfolio of investments in infrastructure-related sectors (or, indeed, in all sectors more generally) presents a comparatively favorable financial proposition (albeit with ex-post variation across decades) and may thus be of interest to potential private co-investors.¹

We undertake our analysis within the broader context of increased efforts by several multilateral development banks and development finance institutions to disclose information on their own investment performance. Investors who are better informed about risks and returns are more likely to invest in otherwise unfamiliar markets. There are two reasons why this is the case. First, as noted by Frank Knight in the 1920s, investors may prefer quantifiable “risk,” which assigns probabilities to specific events, to more vague “uncertainty” with an unknown distribution of returns and related probabilities. Providing investors with information on past returns helps quantify relevant risks.² Second, uninformed views on the risk-return profile of investing in developing economies may be more pessimistic than warranted by

the actual track record of emerging market investments. Better information and transparency can thus help. If data analysis reveals that actual returns exceed uninformed perceptions about risky emerging market investments, foreign investors may become more favorably inclined toward investing in these markets.

The journey toward greater disclosure of information on the risk-return profile of investments in emerging market and developing economies builds on a long tradition at the International Finance Corporation and related institutions. Examples include the 1981 establishment of the IFC Emerging Stock Markets Database and the commencement in 1986 of publishing an annual Emerging Stock Markets Factbook (IFC 2016). The compilation and dissemination of data on developing country stock markets, then in their infancy, contributed to putting developing economies on the radar screens of global investors.³ More recently, the Global Emerging Market Risk Consortium, consisting of 27 multilateral development banks and development finance institutions, pooled its credit risk data to publish information on loan default and recovery rates with increasing detail, thereby permitting initial analysis (for example, Galizia and Lund, 2024).

As part of these efforts to promote greater transparency and provide better information for potential investors, IFC has also begun analyzing and disseminating data on the risks and returns associated with its own investments. Early efforts focused on the returns from all equity investments made by the IFC in firms in developing economies dating back to 1961. Such investments have yielded, on average, higher returns than comparable benchmarks, including the S&P 500 and MSCI World and Emerging Markets Indexes (Cole, Melecky, Mölders, and Reed 2025). No doubt, diversification matters. Of the more than 2,000 investments made since the 1960s, one thousand did rather poorly in narrowly defined financial terms. The bulk were positive though unremarkable, and about a hundred turned out to be spectacular home runs, yielding returns several times above those of comparator indexes (Mölders and

1 The empirical results presented in this note speak to the second hurdle in Gardner and Henry's (2023) Dual Hurdle Framework, which distinguishes infrastructure investments that are (i) good for society and (ii) can be underwritten by private capital on commercial terms, from those that do not satisfy the two conditions.

2 For example, computed estimates from financial statement data show that capital-scarce countries display higher marginal products of capital (Chari and Rhee, 2020).

3 In the late 1980s and early 1990s, policy makers in many developing economies eased restrictions on foreign purchases of domestic shares of publicly-traded companies. As advanced economy investors gained familiarity with opportunities in developing markets, the cost of equity capital in developing economies decreased (Henry 2003), and real investment, wages, and economic growth increased (Henry 2000b; Henry 2007; Chari, Henry, and Sasson 2012). Meanwhile, foreign investors reaped financial gains (Henry 2000a), much of which was driven by the benefits of portfolio diversification (Chari and Henry 2004).

TABLE 1

Financial Performance of IFC Equity Investments in Core Infrastructure

	1961-1995	1996-2009	2010-2020	1961-2020
PME (S&P 500)	1.03	2.75	0.68	1.17
PME (MSCI EM Index)	-	2.00	0.98	1.26
PME (MSCI Country-Specific Index)	-	1.96	0.99	1.31
TVPI	2.93	3.71	1.12	1.80
% of Projects Above S&P Hurdle	42.2	53.8	30.8	40.6
Overall Project Count	45	91	130	266

NOTES: PME is Public Market Equivalent. A PME above one implies that the returns on IFC equity investments outperformed those on an index of publicly-traded equities (as indicated in brackets). The PME is computed using either the S&P 500, or the Morgan Stanley Capital International for Emerging Markets, or the MSCI for the same country as the IFC investment in question. TVPI is Total Value to Paid-In Capital, which measures the total value generated relative to the capital invested. Core infrastructure includes Electric Power, Information, Transportation and Warehousing, and Utilities. The MSCI index is available from 1988 onwards. We only consider investments beginning before end-March 2020. Dashes for the period 1961-1995 indicate that the results are not presented because they would be based on too few observations. The S&P Hurdle is computed as the proportion of projects with cash flows that outperform the S&P 500 index (PME > 1) over identical investment horizons.

Salgado, 2025). Although the returns differed somewhat across sectors, the determinants of success are not easily pinpointed and are being actively researched. In this note, we focus on the returns to investments in sectors that may be categorized as Core Infrastructure—namely, classified under Electric Power, Information, Transportation and Warehousing, and Utilities.

To gauge the relative appeal of investments in infrastructure through the equity of (mostly unlisted) firms in developing economies, we compare the returns on those investments to the returns on investments in various stock market indexes for publicly-listed firms. We do this using a public market equivalent (PME) calculation. The PME considers all money invested in the private fund (contributions) and all money received back (distributions). Specifically, the PME discounts these cash flows, using as the discount rate the public market return over the same period of an index such as the S&P 500.⁴ If the PME is greater than 1, the private

investment outperformed the stock market. If the PME is less than 1, the stock market performed better. Investors can thus gauge whether, and by how much, private equity investments outperform publicly-listed stocks.

Table 1 shows that using the S&P 500 as the benchmark, the PME of all 266 equity investments in core infrastructure by the IFC with starting dates from 1961 to March 2020, was 1.17. Given the typical holding period of eight years, the PME of 1.17 implies that the portfolio of investments in core infrastructure earned an average excess return of 2.0 percentage points per year over the S&P 500.⁵ Using the MSCI Emerging Markets Global Index as a benchmark (based on data beginning in 1988, when the MSCI becomes available), the PME was 1.26, an average excess return of 2.9 percentage points per year over the MSCI EM index.⁶ The public market benchmarks are based on total return indexes, accounting for both price changes and dividends. All returns are expressed in nominal U.S. dollar terms. This means

4 We employ the Kaplan and Schoar (2005) Public Market Equivalent to assess the IFC investment's profitability. This approach compares the ratio of normalized distributions with the normalized contributions based on the market index, which can be written as:

$$PME = \frac{\sum_t \frac{\text{dist}(t)}{1+R(t)}}{\sum_t \frac{\text{cont}(t)}{1+R(t)}}$$

Investments that remain in the portfolio— net asset value as of June 30, 2023, is treated as a positive distribution. This approach assumes that the investment is liquidated on that date at its fair market value. $R(t)$ is the realized total return of the market index (for example, S&P 500) from the year of the first cash flow ($t = 0$) to the time of the distribution (dist) or contribution (cont).

5 Excess return per year = $[(1.17)^{(1/8)} - 1] \times 100 = 1.98$ percentage points. For context, the average annual return of the S&P500 since the 1960s was in the range of 10 percent

6 Excess return per year = $[(1.26)^{(1/8)} - 1] \times 100 = 2.93$ percentage points. For context, the average annual MSCI EM return since 1988 was also in the range of 10 percent or so.

TABLE 2

Public Market Equivalents of IFC Equity Investments in Core Infrastructure by Group of Countries

	1961-1995	1996-2009	2010-2020	1961-2020
Low Income	-	-	-	1.07
Lower Middle Income	1.34	3.39	0.78	1.65
Upper Middle Income	0.89	1.93	0.57	0.77
High Income	1.03	2.82	0.90	1.67
Unclassified (Cross Country Projects)	-	2.36	0.77	1.14
Whole Sample (All Countries)	1.03	2.75	0.68	1.17

NOTES: PME is Public Market Equivalent. A PME above one implies that the returns to IFC equity investments outperformed those on an index of publicly-traded equities (the S&P 500 for this table). We only consider data for investments beginning before end-March 2020. Dashes for sub-periods indicate that the results are not presented because they would be based on too few observations. Country groupings follow the World Bank Income Classification for fiscal year 2026.

that making private equity investments in emerging market infrastructure alongside IFC, a global investor would have achieved, on average over the long run, a better return than holding the S&P 500, and a better return than the MSCI EM index. For comparison, we also calculated the Total Value to Paid-In Capital (TVPI), which measures the total value generated relative to the capital invested. Across all periods, our results show that the overall infrastructure investment portfolio generated substantially higher value than the capital committed.

Table 1 also indicates, however, that the relative performance of IFC equity investments displays significant time-specific variation. Most notably, the PME of IFC equity investments in core infrastructure initiated between 2010 and 2020 was 0.68.⁷ This figure, markedly lower than PMEs in earlier decades, stems from several factors: outsized annual returns on the S&P 500 since 2010; weaker economic performance in developing economies; and, to a lesser extent, real exchange rate appreciation of the U.S. dollar vis-à-vis the currencies of countries with IFC investments. The time-specific variation in the PMEs of emerging market infrastructure is a reminder of risks associated with a portfolio of private equity investments.⁸ In particular, the temporal variation raises an important question for investors. Is the past decade's PME on emerging market infrastructure

a leading indicator of its future underperformance as an asset class, or will the contrary hold true as mean reversion in both global publicly-listed equity markets and emerging economies' private equity markets bring future returns back in line with historical norms?

Either way, investors may also be interested in comparing the returns on private equity investments for a given country with those delivered by investing in that same country's publicly-listed stocks. Accordingly, **Table 1** (Row 3) reports the average, across countries, of the PME for IFC investments through private equity stakes in core infrastructure in each country using, as a benchmark, where available, the country-specific MSCI index. On that basis—again, with data beginning in 1988, when the MSCI becomes available—the average PME is 1.31.

Table 2 switches the view of performance from that of all developing economies, to one disaggregated by level of development in accordance with the World Bank Group's country income classifications. The numbers indicate that, across most income categories, a global investor would have earned higher returns from infrastructure than on the S&P 500.

⁷ IFC equity investments also underperformed somewhat in the last two decades, based on TVPI for private equity portfolios (more heavily weighted on Emerging Asia including China), available only since the early 2000s, reported from private consultancies such as Cambridge Associates.

⁸ Studies of venture capital returns (such as Kaplan and Schoar 2005) seldom attempt to adjust for differences in systematic risk because of the lack of true market values for fund investments until the investments are exited. Even so, if private equity returns have a beta below 1 with respect to the global market, as is likely the case for equity investments in developing economies, the PME will understate the true risk-adjusted returns to IFC equity investments in emerging market companies.

TABLE 3

Public Market Equivalents of IFC Equity Investments in Core Infrastructure by Region

	1961-1995	1996-2009	2010-2020	1961-2020
East Asia and Pacific	1.34	2.45	0.70	1.34
Europe and Central Asia	0.75	3.39	0.53	0.99
Latin America and Caribbean	1.08	1.54	0.57	0.80
Middle East and North Africa	-	0.48	0.96	0.88
South Asia	1.15	1.85	0.80	1.03
Sub-Saharan Africa	1.51	27.86	0.59	5.07
Rest of the World (Cross-Regions)	-	2.81	0.73	1.81
Whole sample (All regions)	1.03	2.75	0.68	1.17

NOTES: PME is Public Market Equivalent. A PME above one implies that the returns to IFC equity investments outperformed those on an index of publicly-traded equities (the S&P 500 for this table). Dashes for sub-periods indicate that the results are not presented because they would be based on too few observations. We only consider data for investments beginning before end-March 2020.

Similarly, [Table 3](#) indicates that, on average, a global investor would have earned higher returns from infrastructure across most geographical regions than on the S&P 500. We view the PME of 5.07 for Sub-Saharan Africa (SSA) with caution, however, because the sample is small. With a total of 24 investments since the 1960s, two “home runs” (PME > 30) in SSA between 1996 and 2009 drive its 1996-2009, period-

specific PME of 27.86, which in turn, drives the overall figure of 5.07. Winsorizing—excluding outlying data points—the data of these two home runs, along with two big-ticket investments with symmetrically poor financial performance gives a more representative view of the period-specific and overall PMEs for SSA: 1961-1995: 1.51; 1996-2009: 1.47; 2010-2020: 1.08; 1961-2020: 1.12.



TABLE 4

Public Market Equivalents of IFC Equity Investments: Core Infrastructure vs. Other Sectors

	1961-1995	1996-2009	2010-2020	1961-2020
Core Infrastructure	1.03	2.75	0.68	1.17
Real Estate/Social Infrastructure	-	0.85	0.53	0.59
Financial Institutions	1.11	1.67	0.72	1.16
Manufacturing, Agribusiness, Services	0.89	1.23	0.53	0.82
Oil, Gas Mining	2.88	1.44	0.18	1.17
Whole sample (All sectors)	1.30	1.65	0.62	1.04
% of All Projects Above S&P 500 Hurdle	26.6	47.7	22.1	32.9
Overall Project Count	689	709	570	1,968

NOTES: PME is Public Market Equivalent. A PME above one implies that the returns to IFC equity investments outperformed those on an index of publicly-traded equities (the S&P 500 for this table). Dashes for sub-periods indicate that the results are not presented because they would be based on too few observations. Data consists of IFC direct equity investments only. (Collective Investment Vehicles are excluded.) Core infrastructure includes Electric Power, Information, Transportation and Warehousing, and Utilities. Social Infrastructure includes health care and education-related infrastructure. The PME for all sectors is lower than in Cole and others (2025), owing to differences in sample (for example, theirs stopped in 2019), valuation date for unrealized projects (June 2023 versus June 2019) and especially to the strong performance of the S&P 500 between 2019 and 2023. The S&P Hurdle is computed as the proportion of projects with cash flows that outperform the S&P 500 index (PME > 1) over identical investment horizons.

Zooming back out to a view of all developing economies for a final parsing of the data, [Table 4](#) reports the average PME for IFC's equity investments in core infrastructure alongside the PME for its investments in other major sectors. Except for real estate/social infrastructure (comprising real estate, education, and health care) which underperformed, there is no statistically significant difference in mean returns between the infrastructure sector and non-infrastructure sectors (see tests reported in the Appendix). Although the underperformance of real estate/social infrastructure may stem from the small number of observations, the result may also suggest that core infrastructure is simply more profitable. If further data disclosure and analysis confirm this finding, then the broader public benefits of investing in social infrastructure may need to be financed through domestic revenue mobilization.

To sum up, the evidence from IFC's experience suggests that, on average over the long run, financial returns on equity investments in firms in developing economies are at least as profitable as those on publicly-listed stocks, whether globally or in the same countries in question. This result applies to infrastructure and non-infrastructure investments alike. Further disclosure of historical data on the performance of investments by other development finance institutions would complement the results reported in this note. Disclosure will also provide private investors with the information they need to move from uncertainty about developing country infrastructure as an asset class to greater clarity about its risks and returns ■

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Appendix A: Data

The information is drawn from the International Finance Corporation (IFC) private equity investment dataset. Through its investments, IFC aims to achieve social and environmental outcomes that align with the United Nations' Sustainable Development Goals.

The data covers the entire history of IFC equity investments, which began in 1961. Such projects span a wide range of countries, sectors, and time periods. The data consists of cash flows at monthly intervals.

In line with the private equity literature, we consider only equity investments that began during the period from 1961 to March 2020. More recent investment vintages are excluded, as most of them are still in their investment phase. For investments that had not yet been realized as of June 2023, we use their mark-to-market valuation as of that date.

Our primary data are the inward and outward cash flows for all [1,968] equity investments (in private companies) with beginning dates from the IFC's founding (1956) to the end of March 2020. The data include the month of each cash flow and the value of cash flow in U.S. dollars. Aligning with finance terminology, contributions are the negative cash flow. Distributions are positive cash flow to the investor (IFC) through the sale of a company's shares or dividend payments. An investment "vintage year" is defined as the year in which the company receives the first cash flow.

Each project-level investment is assigned to one of 21 primary sectors (e.g., Utilities, Mining, etc.). Our central analysis focuses on core infrastructure, which includes the four sectors: Electric Power, Transportation and Warehousing, Information, and Utilities. For comparison, we also expand our analysis beyond core infrastructure. These include: Financial Institutions, Real Estate/Social Infrastructure, Manufacturing, Agribusiness and Services, and Oil, Gas, and Mining.

We also have data on the project's country of location. Most projects are in a single country. Some projects span multiple countries and are classified at the regional level (e.g., Eastern Europe, Eastern Africa, or the World).

Appendix B: Sectors Classification

Key Sectors	Primary Sectors in Key Sectors
Core Infrastructure	Electric Power, Transportation and Warehousing, Information, and Utilities
Real Estate/Social Infrastructure	Construction and Real Estate, Health Care, Education Services
Financial Institutions	Finance & Insurance
Oil, Gas and Mining	Oil, Gas and Mining
Manufacturing, Agribusiness, Services	Accommodation & Tourism Services, Agriculture and Forestry, Chemicals, Food & Beverages, Industrial & Consumer Products, Nonmetallic Mineral Product Manufacturing, Plastics & Rubber, Primary Metals, Professional, Scientific and Technical, Services, Pulp & Paper, Textiles, Apparel & Leather, Wholesale and Retail Trade

Appendix C: Statistical Tests of Difference in PMEs

	N	Simple Mean	Std Dev	t-statistics	p-value
Core Infrastructure	266	2.03	6.54		
Two-Sided Statistical T-Test (Core Infrastructure vs All Other Sectors)					
Real Estate/Social Infrastructure	109	0.61	0.64	3.45	0.00
Finance & Insurance	626	1.55	7.94	0.94	0.35
Oil, Gas and Mining	162	5.55	38.47	-1.15	0.25
Manufacturing, Agribusiness, Services	805	6.88	165.45	-0.83	0.41

NOTE: Two-sided t-tests show no significant evidence that we can reject the null hypothesis that the simple average Core Infrastructure public market equivalents are different from other sectors, except for Real Estate/Social Infrastructure.

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