MOODY'S

SECTOR IN-DEPTH

6 December 2021





Contacts

Thaddeus Best +44.20.7772.8744

AVP-Research Analyst
thaddeus.best@moodys.com

Manas Mehta +1.212.553.1428 Senior Associate-MSC manas.mehta@moodys.com

Divya TiwariAssociate
divya.tiwari@moodys.com

Ariane Ortiz-Bollin +1.212.553.4872
Vice President-Sr Credit Officer
ariane.ortiz-bollin@moodys.com

Atsi Sheth +1.212.553.7825

Managing Director - Credit Strategy
atsi.sheth@moodys.com

Emerging Markets – Global

FDI flows to emerging markets face structural headwinds, weighing on growth potential

Foreign direct investment (FDI) into emerging markets (EMs) increased rapidly in the 1990s, as global companies expanded their global supply chains and sought new markets for their products. FDI soon became the single largest component of capital flows into EMs, and a driver of growth. Not surprisingly, the pandemic induced a decline of 12% in annual global FDI flows into developing countries. However, even prior to this drop, aggregate FDI flows into EMs as a share of GDP had almost halved in the decade before the pandemic, compared to pre-global financial crisis period. ¹ In this report, we explore the drivers of this decline and the credit implications for sovereigns.

- » Decline in FDI to Africa, the Middle East and Emerging Europe was greater than to emerging Asia and Latin America. Falling returns on investment are cited as one of the reasons for the decline. However, some of the decline in FDI is likely attributable to a decline in phantom 'pass-through' capital flows rather than 'true' FDI. And regional aggregates mask country specific differences.
- » Slowing real GDP growth in some regions and lower investment returns are the most common factors behind the decline. Although EM macroeconomic stability has generally improved and institutional impediments to inbound FDI have declined, with few exceptions, growth rates in the last decade were slower than in the prior decade, and while there are significant differences across sectors and countries, average returns on FDI in some EM regions have fallen to the same levels of developed markets.
- » Weaker FDI inflows could weigh on long-term growth potential, given that FDI has been a key source of knowledge and technology transfer, supporting total factor productivity growth. While some countries with high domestic savings rates may be better placed to manage the impact of a decline in FDI on fixed investment, those with lower domestic savings and weaker capital markets access, such as smaller countries in Latin America and Africa, are more likely to be affected as a result of lower FDI flows.
- » Structural headwinds are likely to prevent a reversal in the trend. A protracted and uneven recovery across emerging markets, coupled with deglobalisation and growing interest in shortening supply chains to address some of the vulnerabilities laid bare by the trade tensions between the <u>US</u> (Aaa stable) and <u>China</u> (A1 stable), and more recently the pandemic, present significant challenges for growth in EM FDI inflows.

Decline in FDI more apparent in Africa, the Middle East and Emerging Europe, than emerging Asia and Latin America

The rise in foreign direct investment (FDI) brought numerous benefits for emerging markets. For many countries, FDI represented a significant new source of foreign capital, supporting economic development particularly for those with constrained access to the international capital markets and/or with thin domestic capital markets.

Moreover, even for countries with ample access to capital, inward FDI flows were accompanied by additional growth-supporting benefits, such as the transfer of technology and management techniques from developed markets.

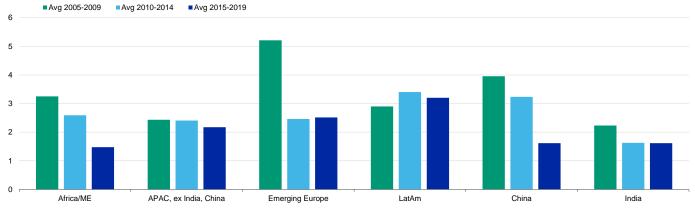
FDI flows also tend to be more stable due to their longer-term investment horizon, compared to portfolio flows and other investment, which are mainly cross-border bank lending. While some FDI flows can still exhibit volatility, these are typically 'pass-through' capital flows that do not correspond to 'true' FDI (which we discuss further below). As such, FDI remains a stable source of funding from an external accounts perspective, which is also typically less debt-creating for emerging markets compared to other sources such as portfolio investment.

As Exhibit 1 shows, FDI flows as a share of GDP have declined in the last decade in Africa, the Middle East and Emerging Europe (from relatively high levels in the last case). FDI share of GDP remained relatively stable in Latin America and Asia Pacific. However in Asia, China and India (Baa3 stable)) which we exclude from the aggregates given their scale – also experienced declines, although India's was relatively modest.

There have been variations within regions. In Emerging Europe, FDI flows have fallen steadily in countries like <u>Poland</u> (A2 stable) where it declined from an average of 4.0% of GDP between 2000-09 to 2.7% between 2010-19, and <u>Hungary</u> (Baa2 stable), where it more than halved from 16.4% to 6.4% of GDP during the same period. In contrast to some other regions such as Latin America and Sub-Saharan Africa (SSA), FDI flows into Emerging Europe have been primarily concentrated in the manufacturing sector, thus the decline in FDI share of GDP from relatively high levels may reflect lower needs for manufacturing capital expenditures in some cases.

In Africa, some of the largest economies like <u>South Africa</u> (Ba2 negative) have also seen declines during the last decade (-0.7 pp of GDP). Relative to GDP, FDI inflows into oil producing SSA economies like <u>Nigeria</u> (B2 negative) have not declined significantly. However, this partly reflects the very large deflationary impact of lower oil prices on nominal GDP levels in Nigeria. For example, between 2010-14, average FDI inflows were \$6.4 billion. However, between 2015-19 they declined to \$2.4 billion on average.

Exhibit 1
FDI inflows have declined in most major emerging markets
Average FDI inflows, % of GDP



Sources: IMF WEO and Moody's Investors Service. Note: regional aggregates based on 22 largest EMs by region

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Even in Latin America, where FDI ratios remained stable at a regional level, this was in part due to the denominator effect of contracting nominal GDP in the region, mainly due to lower commodity prices, a signficant drop in inflation and a prolonged economic recession in Brazil (Ba2 stable). In China, inward FDI flows have declined from an average of 4% of GDP between 2005-09, to 3.2% between 2010-14 and further to 1.6% between 2015-19.

Measure of true FDI flows can be challenging due to accounting identities and pass-through capital masquerading as long-term investment

Although micro-level sources exist in some countries, the majority of FDI data is recorded at macro level via the IMF balance of payments accounting identity. This can make measuring FDI challenging for several reasons.

First, the FDI inflows may not relate to new cross-border flows; a significant portion of FDI flows are comprised of 'reinvested earnings', which is an imputed financial account entry derived from the share of reinvested earnings from the current account attributable to foreign investor's share of ownership, which may then be spent on current, as well as capital expenditure. The other two main classifications of FDI flows are 'equity other than reinvested earnings' (also known as 'new equity flows') and 'debt flows' (which is primarily inter-company lending). Equity flows include greenfield investment, as well as mergers and acquisitions.

There can be significant differences in the composition of FDI equity investments. For example, in major EMs in Latin America, new equity investments accounted for just half of total FDI between 2011-19, while reinvested earnings accounted for a third. In contrast, reinvested earnings into the APAC region accounted for around a tenth of total FDI during the same period. Debt instruments recorded as FDI typically comprise intercompany lending between affiliated enterprises – usually loans and debt instruments.

Nonetheless, a granular breakdown of FDI inflows shows that there has been a decline in the amount of equity capital flows relative to GDP in Africa and the Middle East (Exhibit 2), Emerging Europe (Exhibit 3), APAC (excluding China and India) and China and India. Inflows to Latin America remained stable. However, similar to the overall FDI figures, the regional aggregate for Latin America is skewed by a large decline in nominal GDP in Brazil, which inflates the flows relative to GDP for the region's largest economy, despite the decline in nominal flows from 2012 onward.

Exhibit 2

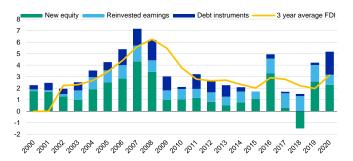
New equity inflows have declined significantly in Africa and the Middle East...

FDI subcomponents - Africa and the Middle East, % of GDP



Note: Regional aggregates refer to selection of 22 major EMs Sources: IMF and Moody's Investors Service

Exhibit 3 ...Emerging Europe is inflated by Hungary's inflows, which are likely tax-influenced flows FDI subcomponents - Emerging Europe, % of GDP



Note: Regional aggregates refer to selection of 22 major EMs Sources: IMF and Moody's Investors Service

Moreover, FDI statistics can also be distorted by pass-through capital, which is when the financial flows are purely designed to minimise tax payments or overcome regulatory barriers, rather than providing real, long-term investment.

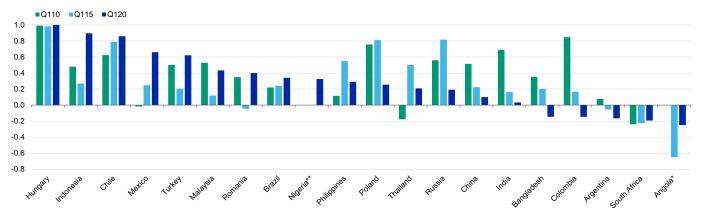
Pass-through FDI flows are difficult to track, particularly in the absence of directional FDI flow data. Directional FDI flow data is published by the OECD, but only for a subset of the sovereigns in our sample. Nonetheless, a crude estimate of pass-through FDI can be derived by looking at the correlation between FDI inflows and outflows. As FDI inflows logically have little correlation with FDI outflows, given that FDI flows typically represent long-term, independently formulated investment decisions by multinational entities, a high level of correlation between quarterly FDI flows may suggest that these are in fact pass-through capital flows on their way to a final destination.

Out of the 22 major EM sovereigns in our sample, five sovereigns had a 20-quarter rolling correlation of more than 50%. Of these, three had a correlation of 85% or greater: Hungary (99%), Indonesia (Baa2 stable, 90%) and Chile (A1 negative, 86%) as of the first quarter of 2020 (see Exhibit 4). These unusually high numbers suggest that a significant portion of the FDI recorded flowing through these sovereigns is likely to be pass-through capital being routed through special purpose entities, and therefore significant care should be exercised when interpreting the FDI data. The central bank of Hungary has switched to net flows rather than gross flows as the best measure of its contribution to the Hungarian economy for this reason. In the case of these three countries, there are several possible explanations for this. In Hungary, this is likely in part due to its bilateral tax treaty with the US, which is one of only seven not to include any limitation on benefits rules, meaning that third-country residents can take advantage of these treaties and use Hungary as a waypoint for capital going to the US.² Aside from Hungary, research from the Peterson Institute suggests that a lower relative corporate tax rate and higher capital controls on non-FDI inflows tend to increase the correlation between FDI inflows and outflows.

Exhibit 4

FDI flows in Hungary, Indonesia and Chile are likely to be in part driven by pass-through capital

Major emerging markets - Twenty-quarter rolling correlation between net acquisition of FDI assets and net incurrence of FDI liabilities, %



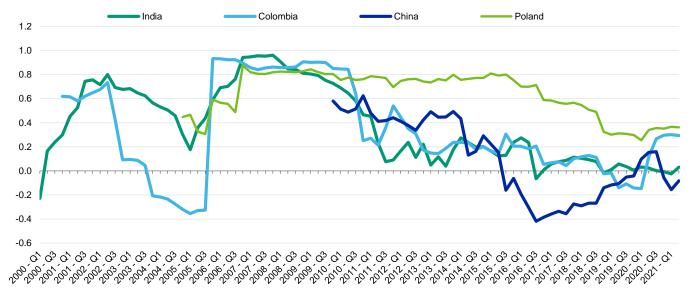
Note: Higher correlation suggests a greater likelihood of pass-through capital. No quarterly data available for Kenya or Ethiopia. *Data missing for Q110 sample period. ** Data missing for Q110 and Q115 sample period.

Sources: IMF and Moody's Investors Service

However, for just under half of the EM sovereigns in our sample, the correlation is fairly weak (<25%) and in many cases even negative. For these sovereigns, tax incentives and other factors driving pass-through capital are less likely to be a determinant of FDI trends, as the overall share of pass-through capital relative to total FDI flows is likely to be lower.

Moreover, a number of other countries such as Colombia, India, Russia and Poland, which previously exhibited a high degree of correlation (>50%) between the change in FDI assets abroad and FDI liabilities, have seen a significant decline since 2010, which may suggest that the share of pass-through capital relative to total FDI flows has declined (see Exhibit 5).

Exhibit 5
The decline in FDI in some markets may be attributable to falling 'pass-through' capital, rather than 'true' FDI
Selected emerging markets - Twenty quarter rolling correlation between net acquisition of FDI assets and net incurrence of FDI liabilities, %



Sources: IMF and Moody's Investors Service

This may suggest that at least some of the decline in FDI is attributable to lower pass-through capital rather than 'true FDI'. In contrast, both Hungary and Indonesia have seen their FDI correlations remain steady since 2010, suggesting that changes in the level of pass-through capital have not been a significant driver of changes in overall FDI flows. Overall, this would suggest that on balance, declining pass-through capital flows have accounted for at least some of the decline in FDI flows that we see in our sample of major EMs.

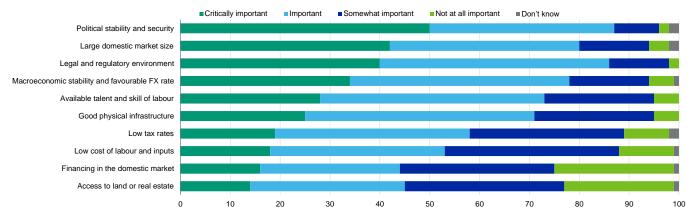
Falling investment returns on FDI in EMs and slowing real GDP growth in some regions are the most common factors behind the decline

While declining pass-through FDI flows may account for part of the decline of FDI in EMs, they do not fully explain the decline. The drivers behind the fall in FDI are manifold and vary from country to country and region to region. Nonetheless, at a high level there are some recent trends that are particularly striking, which are fairly consistent across the EM universe. Perhaps the two most salient features are the decline in returns on FDI in EMs, which has significantly reduced the relative rewards of these investments relative to more stable and predictable, developed markets, and the slowdown in growth across major EMs in the last decade.

An executive survey from the Global Investment Competitiveness Report covering factors affecting investment decisions shows that political stability, a large domestic market size, the legal and regulatory environment, macroeconomic stability and favourable exchange rates were among the most important factors in investment decisions in emerging markets (see Exhibit 6).

Exhibit 6

Political stability, market size, legal environment and macroeconomic stability are key for investors Importance of country characteristics for investment decisions



Note: Multinational corporation executives were asked how important these characteristics were in their decision to invest in developing countries. Source: Global Investment Competitiveness Report 2017/2018

Return on FDI across most EMs has dropped, closer to that of developed markets

Before the global financial crisis, FDI in major EMs offered higher rates of return compared to developed markets, helping compensate investors for the additional risks associated with EM investments, such as more challenging regulatory and business environments and higher political risks. However, since 2009, returns on FDI across EMs have declined significantly. Crucially, returns on FDI in developed markets have not fallen by the same degree, meaning that the excess return generated by FDI in emerging markets has dropped from a high of five percentage points in 2008 to less than two percentage points by 2018 (see Exhibit 7).

Exhibit 7
Relative outperformance of EM FDI returns has declined significantly over the last decade Returns on foreign direct investment, %



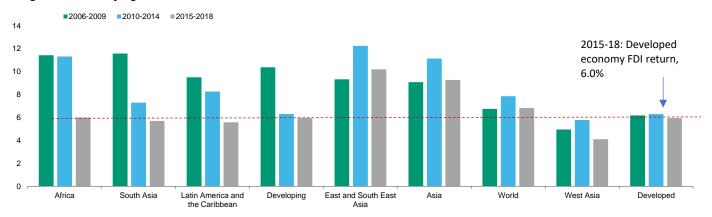
Looking at regional aggregates, the only regions to offer returns in excess of those found in developed markets were Southeast and East Asia, while Africa offered returns on par with developed markets (see Exhibit 8). In contrast, FDI returns in South Asia, Latin America and the Caribbean have all fallen below returns in developed economies.

The implications of declining FDI returns are twofold. First, in terms of the existing stock of FDI, the size of returns generated will be smaller, resulting in a decline in the level of imputed reinvested earnings. Foreign investors like large multinationals seeing lower returns on their capital in these markets may also be more likely to withdraw a higher share of dividends to redeploy to markets with more favourable risk/reward profiles. Second, falling returns will disincentivize investors from making new equity investments in EMs.

Exhibit 8

Returns on FDI in most EM regions have dropped, except East and Southeast Asia

Average returns on FDI by region, %

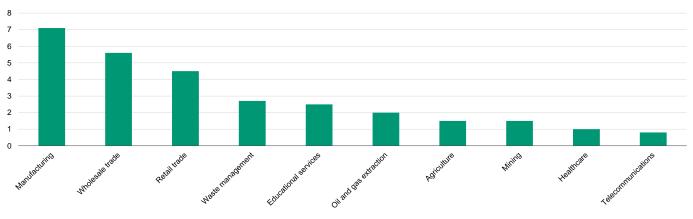


Source: UNCTAD

Returns in the extractive sector have been particularly weak

UNCTAD's World Investment Report attributes the decline in returns in Africa and West Asia to declining commodity prices.³ However, using a more granular survey of US multinationals, the 27th Global Trade Alert report shows that between 2015 and 2018, returns on commodity focused sectors like oil and gas extraction and mining have been very low at 2% and 1.5%, respectively, while sectors like manufacturing and wholesale trade have generated much stronger returns of 7.1% and 5.6% (see Exhibit 9). This may help explain the relative outperformance of FDI returns in Emerging Asia, which have attracted a greater share of FDI directed to the manufacturing sector.

 $^{\rm Exhibit\,9}$ Returns in commodity focused sectors are low compared to manufacturing FDI returns by sector, %



Source: UNCTAD

While the global financial crisis in 2009 triggered a collapse in commodity prices, Chinese growth helped power a second commodities cycle lasting from 2010 until 2014. However, from 2014 onward, as Chinese growth slowed amid an economic rebalancing to a consumption-led growth model, commodity prices fell sharply. The value of global FDI into greenfield investments in the extractive sector declined from an average of \$97 billion in 2005-09 to just \$29 billion in 2016-20, while cross-border mergers and acquisitions declined to \$40 billion from \$57 billion (see Exhibits 10 and 11).

Exhibit 10 Greenfield investments in the primary sector have declined steadily since 2008...

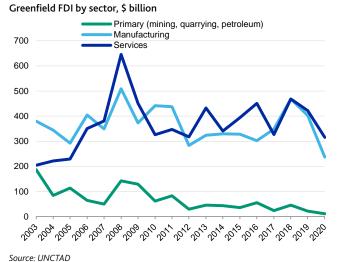
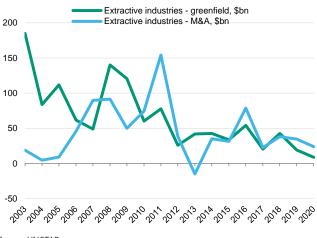


Exhibit 11while M&A transactions have also fallen Greenfield and M&A FDI



Source: UNCTAD

EM growth rates have slowed significantly over the last decade

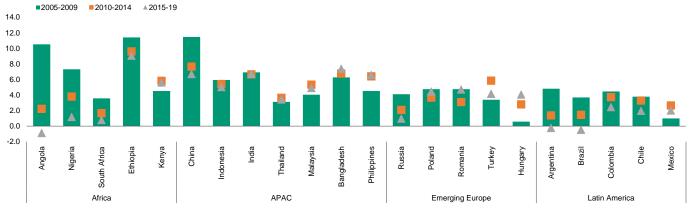
Real growth rates across the EM universe have diverged significantly since the global financial crisis, which is also likely undermining their attractiveness as FDI destinations. On a simple real GDP basis, most major EMs reported lower growth in the years following the global financial crisis than the years preceding it (see Exhibit 12).

The most significant growth declines were seen among commodity exporting sovereigns. In particular, Africa's hydrocarbon exporters (in part due to OPEC production constraints and the impact of the lower oil price environment on investment from 2015 onward), and in Latin America, where Argentina (Ca stable), Brazil (Ba2 stable), Chile and Colombia (Baa2) saw sharp declines in real GDP growth. Conversely, sovereigns in the APAC region continued to report growth rates that were similar to pre-crisis levels, although notably China's official real GDP growth rate decelerated across this period (albeit from a very high base). Despite the deceleration in Chinese growth, it remained faster than in most other EMs, many of which saw growth declining to low single-digit levels more typically associated with developed markets. The relative strength of Chinese growth, even during its slowdown phase, may have helped to support the broader APAC region's relative growth outperformance given strong trade linkages between these sovereigns.

Exhibit 12

Apart from those in APAC, almost all major EMs have seen growth rates decline

Average real GDP growth rates, %



Source: Moody's Investors Service

Meanwhile, the pandemic is also more likely to have longer lasting effects for EMs compared to their developed market counterparts, in part because they were not able to deploy as much fiscal support during the acute phase of the pandemic, and also because the much slower rate of vaccinations means that the third and fourth waves of the pandemic are likely to cause more economic disruption compared to developed market peers. Additionally, many EMs are more dependent on sectors like tourism that have been severely affected by the pandemic and where the recovery is likely to take several years. Sovereigns with preexisting challenges related to macroeconomic imbalances or weakening institutions, such as Argentina and Zambia (Ca stable), are also among those likely to face difficulty returning to pre-pandemic growth rates, while those where growth had already slowed before the pandemic, such as Mexico and South Africa, will also likely find it harder to restart their domestic economies.⁴

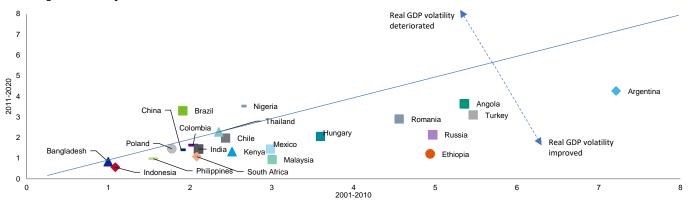
Slower growth aside, macroeconomic conditions have become less volatile across EMs

EMs have typically suffered from more volatile macroeconomic environments and weaker institutional frameworks compared to developed markets, both of which have the potential to deter foreign investors. However, these two factors have improved in EMs in the recent decade, which means that they are unlikely to be drivers of the recent decline in FDI to EMs. Macroeconomic stability (measured by real GDP growth volatility) has improved for most EMs in the last decade (see Exhibit 13), while institutional factors within EMs – such as restrictions on inbound FDI – have also generally remained stable or improved.

Exhibit 13

Macroeconomic stability improved for almost all EMs apart from Brazil and Nigeria

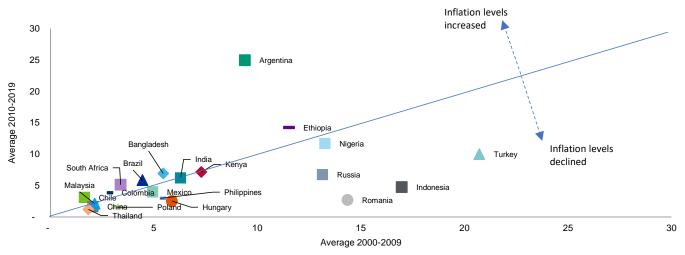
Real GDP growth volatility, %



Source: Moody's Investors Service

Inflation trends point to a similar picture, with inflation in most major EMs remaining steady in 2010-19 compared with the preceding decade (see Exhibit 14). Some EMs that experienced high inflation in 2000-09 saw a significant drop in inflation in the subsequent decade, including Russia (Baa3 stable), Romania (Baa3 stable), Indonesia and Turkey (B2 negative). While the inflationary shock from the pandemic-driven supply-chain disruptions coupled with resurgent demand from developed countries could threaten to reverse some of this improvement in the near term, the shock is unlikely to result in structurally higher inflation given that it remains a supply-side shock, and given considerable levels of labour market slack in most EMs.

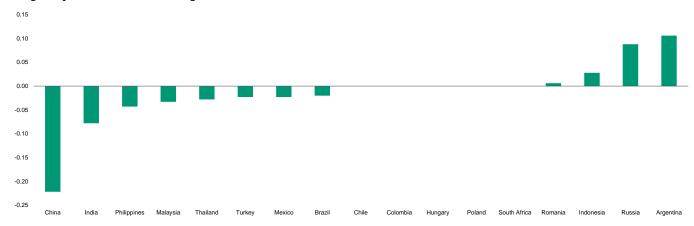
Exhibit 14
Inflation declined for most major EMs across the last decade
Average annual consumer price inflation



Source: Moody's Investors Service

Regulatory restrictions on FDI in major EMs have also generally improved or remained stable over the last 15 years, as measured by the OECD's FDI regulatory restrictiveness index (see Exhibit 15). Only Romania, Indonesia, Russia and Argentina saw a material deterioration in FDI restrictions, while most major EM sovereigns saw improvements or no changes.

Exhibit 15
Most EMs loosened FDI restrictions over the last decade
FDI Regulatory Restrictiveness Index, change 2010-20



Note: Negative change represents a loosening of FDI restrictions Source: OFCD

Declining FDI will slow technological transfers, and in some cases constrain investment

Despite the significance of FDI inflows for EMs' financial accounts, literature investigating the impact of these flows on economic activity is often contradictory or inconclusive. In part, this relates to the severe limitations of the data, which are principally drawn from aggregate balance of payments data (BoP) that do not differentiate between greenfield investment (representing the creation of new capital assets) and mergers and acquisition activity (representing the transfer of existing capital assets) or imputed reinvested earnings. Furthermore, the BoP data is also susceptible to capturing short-lived 'pass-through' capital usually driven by tax incentives, rather than 'true' FDI. Nonetheless, there have been several studies that have confirmed the positive link between greenfield FDI flows and domestic investment.⁵

FDI as a source of capital for fixed investments

For some EMs, FDI is an important source of capital, particularly where domestic savings levels are low and/or domestic capital markets are shallow, and access to international capital markets are constrained. In these capital-scarce countries, FDI can help to bridge the gap between savings and investment needed to place them on a convergence path with developed economies.

In addition, FDI is a more stable source of external funding compared to alternative external sources like portfolio inflows or cross-border bank borrowing, providing a degree of additional resiliency against external volatility that might arise, for example, from monetary policy in major reserve currency sovereigns, or even volatility in domestic sources of funding.

Across global EMs there are significant differences in the availability of capital. From a regional perspective, major EMs in Latin America and Sub-Saharan Africa have significantly lower domestic savings levels than those in Emerging Asia. Over the last ten years, the savings level in major EMs in Latin America and Sub-Saharan Africa has also declined further (see Exhibit 16).

Exhibit 16
Savings buffers are lowest in Africa and Latin America...
Gross national savings, % of GDP

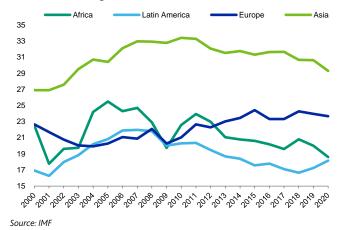
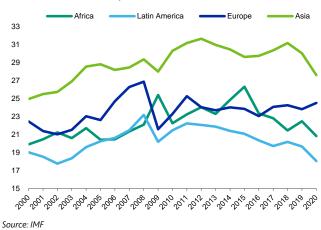


Exhibit 17
...mirroring low national investment levels
Gross national investment, % of GDP



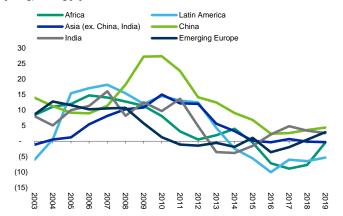
For sovereigns with relatively more constrained access to sources of capital, all else being equal, lower FDI flows will reduce the capacity to spend on fixed capital formation. Broadly speaking, there has already been an accompanying deceleration in gross fixed capital formation (GFCF) growth alongside the decline in FDI into EMs. The slowdown in fixed investment has been most pronounced in Africa, and also notably Latin America. In contrast, fixed investment growth remained above developed markets in Asia (even after removing China and India), albeit growth has decelerated significantly in recent years. This is significant as it suggests without a reversal of this trend, EMs may struggle to converge toward developed market status given the importance of capital formation in driving EM growth over the last two decades (see Exhibit 18).

FDI as a source of innovation and technical expertise, supporting productivity gains

While FDI is less relevant as a source of capital among the sovereigns with more abundant access to capital, including many of the emerging Asian sovereigns that benefit from very high levels of domestic savings compared to other regions, falling FDI flows could still have adverse effects. For example, in addition to contributing to the physical capital stock, FDI flows are associated with the transmission of technical knowledge, creating research and development spillovers and also supporting training of the labour force.

Exhibit 18

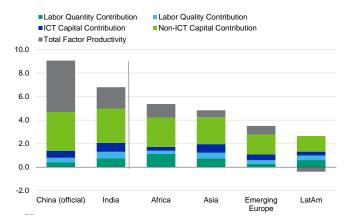
Fixed capital formation has slowed across all EMs in the last decade Relative growth of GFCF per capita compared to high income countries (3-yr avg), % chg y/y



Note: regional aggregates comprised of 22 selected major EM sovereigns. Positive rate of growth indicates a trend of convergence with high income countries, while negative rate of growth indicates a trend of divergence.

Sources: IMF and Moody's Investors Service

Exhibit 19
Capital formation has been the engine of EM growth
Average contribution to real GDP growth, 2000-19



Note: regional aggregates comprised of 22 selected major EM sovereigns. ICT= Information and Communication Technology Source: Conference Board

This is significant because technological improvements and other efficiency gains are also an important source of productivity growth for EMs (see Exhibit 19). Typically, this transfer occurs by way of vertical spillovers. These are spillovers that transfer through the supply chain (e.g., from foreign-invested firms to domestic input suppliers). This factor is particularly salient in China and India, as well as emerging European and African sovereigns, where total factor productivity has played an outsized role in driving real GDP growth.

Structural headwinds likely will prevent FDI from returning to previous levels

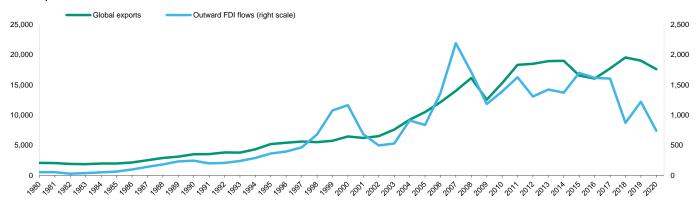
FDI flows into EMs face several structural major headwinds over the medium term, which reduce the probability of a reversal in the recent decline in FDI. The first major challenge is the slow and uneven recovery we expect across EMs in the aftermath of the pandemic compared to developed markets, with generally more constrained healthcare system capacity and often less access to coronavirus vaccines, as well as less fiscal firepower to buttress the economy against the impact of the pandemic (see 'Emerging Markets - '2022 Outlook - Multispeed recovery with stark differences across regions and sectors'). This protracted recovery is likely to also have an adverse impact on FDI returns in EMs, as well as constraining growth in the market size for investors.

While there has been a significant run up in the prices of energy commodities like oil, gas and coal as the reopening of economies across the globe leads to demand outstripping existing supply, our core view is that energy prices will ease in 2022 given that some of the factors contributing to the current market dislocations are transient. As such, while higher commodity prices may provide some tail winds for FDI returns over the short term, these are unlikely to drive a long-term reversal in the decline in FDI inflows.

Another challenge stems from slowing global trade growth. While FDI flows and global trade are distinct, they are often linked, particulary when FDI is flowing into export-focused sectors like mining or manufacturing. For example, a greenfield multinational investment in a mine in Sub-Saharan Africa would contribute to sovereign exports once operational. From this perspective, stalled global trade poses a potential threat to FDI.

Globalization, which shaped global economic relationships since the late 1980s, had already partially reversed in recent years, as reflected in growing trade tensions between the US and China even before the pandemic. In the post-pandemic era, we expect the US-China relationship to become a more strategic rivalry in key sectors such as technology, financial services and education. The fraying of US-China political and economic ties will inevitably affect the rest of the world, particularly with regard to global trade.

Exhibit 20
Stalling global trade bodes ill for FDI
Global exports and outward FDI flows, \$ billion



Source: UNCTAD

Finally, the pandemic has highlighted the vulnerabilities of supply chains, particularly 'just-in-time' manufacturing models that depend on predictable shipping conditions to minimize the need for storage and warehousing space. However, this year supply has not been able to keep up with the revival in demand, with the pandemic causing disruptions and delays throughout the global goods supply chain. For example, semiconductor shortages continue to hamper global car production. Trucker and dock worker shortages in the US, the UK and across Europe have cascaded into congested sea lanes, clogged ports, ships stuck at sea, and full warehouses unable to complete orders. Consequently, the coronavirus pandemic will accelerate the move toward a more fragmented and protectionist global economy, with competing economic blocs and restrictions on trade, investment and technology transfers. The diversification of supply chains will reduce reliance on single suppliers. The localization of some production will result in a relocation of supply to places that are geopolitically and geographically closer to the home countries or end users, or both.^Z

The extent to which this is negative for emerging markets will depend on whether supply chains are shortened or merely diversified. Indeed, in the case of the latter some EMs may benefit, for example other developing Asian sovereigns may become recipients of foreign investment intended to diversify supply chains away from being overly dependent on China. In contrast, a shortening of supply chains, bringing them closer to domestic markets (e.g., such as the shifting of semiconductor production from China to the US) would more likely adversely affect the prospects of FDI flows into EMs.

Moody's related publications

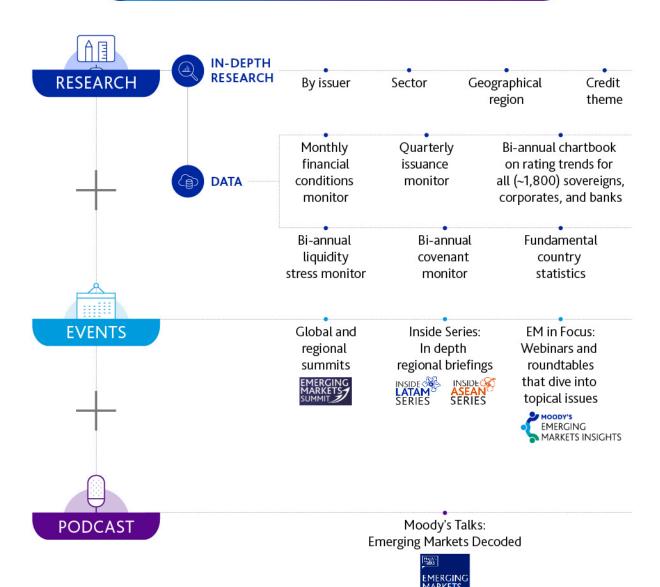
» Emerging Markets - Global - '2022 Outlook – Multispeed recovery with stark differences across regions and sectors', 10 November 2021

- » Global Macro Outlook 2022-23 <u>Global economy will gain steadier footing although supply troubles, inflation pose risk</u>, 4 November 2021
- » Macroeconomics Global 'FAQ on our outlook for global inflation and interest rates', 8 September 2021
- » Sector In-Depth Global 'Coronavirus will shape and accelerate global economic, business and consumption trends', 18 June 2020

Discover Emerging Markets Content



Find it all here: moodys.com/emergingmarkets



Endnotes

- 1 In nominal terms, just over half of emerging markets saw a decline in FDI inflows in 2015-19 compared to 2005-09: around a third saw FDI decline by 25% or more, and a fifth saw FDI more than halve.
- 2 Peterson Institute For International Economies. What Does Measured FDI Actually Measure? Olivier Blanchard and Julien Acalin, October 2016. Pages 16-17
- 3 UNCTAD data does not provide sufficient granularity on the returns by sector or country (which are calculated from BOP data).
- 4 See: Sovereigns Global: Scarring from COVID-19 pandemic will increase fiscal risks and social pressures, 22 July 2021.
- 5 Ashraf, A. and D. Herzer (2014). The effects of greenfield investment and M&As on domestic investment in developing countries, Applied Economics Letters. 21(14): 997-1000.
- 6 Surging oil, gas and coal prices should ease in 2022, 1 November 2021
- 7 See: Coronavirus will shape and accelerate global economic, business and consumption trends, 18 June 2020.

© 2021 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS, DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING. OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1308222

