Look Forward

Emerging Markets: A Decisive Decade

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S&P Global

Emerging markets are strategically positioned to drive global economic growth through the expansion of their domestic markets and to benefit from the reconfiguration of supply chains, trade and investment.

In this latest *Look Forward* report*, Emerging Markets: A Decisive Decade*, our authors explore the factors and trends that will shape these vibrant economies. Our inaugural edition focused on emerging markets presents deep data and analysis that highlight how supportive demographics, abundant natural resources, evolving trade dynamics, and technological innovations in energy and manufacturing could propel the development of these markets. However, a global landscape characterized by geopolitical disruption, climate change, and limits to frictionless trade and globalization presents complex challenges.

This research provides essential intelligence for decision-makers looking beyond the near term. With a view to the longer horizon, we provide a framework to explore the diverse characteristics across emerging markets while also assessing the critical factors — market structure, institutional quality and infrastructure efficiency — that will impact their ability to navigate these complex challenges and harness their economic potential. We examine which emerging markets are set to climb the income ladder and how productivity growth will be essential to unlocking faster development.

Demographic changes and stresses from climate impacts will place upward pressure on government debt. Even so, improved external positions, higher reserve buffers and increased monetary effectiveness have made emerging markets less vulnerable to financial shocks. Population growth, urbanization and economic expansion will increase demand for electricity. Upskilling the labor force, improving infrastructure and competing with advanced economies in new technologies such as robotics and AI will determine emerging markets' longer-term competitiveness. Among the many critical questions that must be considered are how these countries will approach the multidimensional transition, including their efforts to decarbonize their markets, their vulnerability to climate risk and their financing needs for climate change action and mitigation.

We hope these articles initiate a constructive dialogue about the future of emerging economies, and we look forward to discussing these topics further and hearing your own insights.

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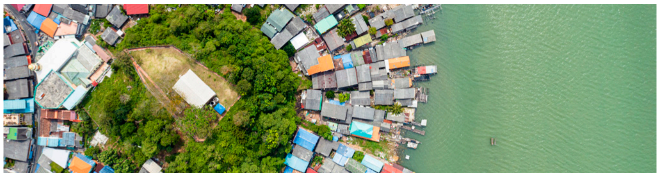

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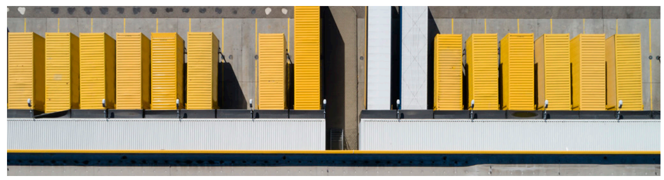

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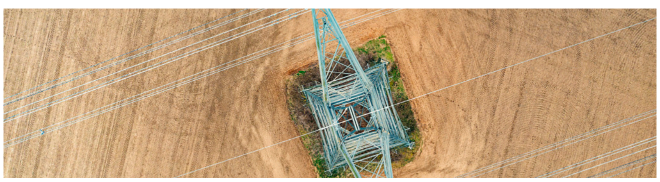

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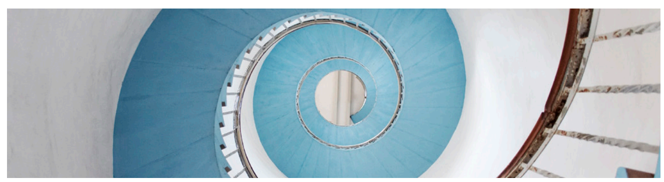

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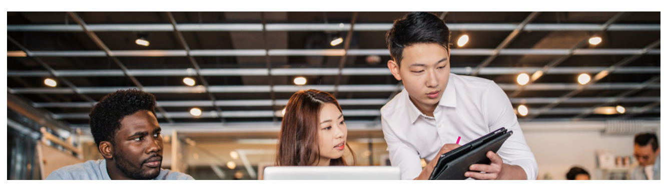

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Emerging Markets: A Decisive Decade

Emerging markets are set to drive global economic growth over the next decade and are at the cusp of a complex global landscape that will be pivotal for the solidification of their progress.

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Highlights

Emerging markets will play a crucial role in shaping the global economy, contributing about 65% of global economic growth by 2035, with nine key emerging markets ranking among the 20 largest economies. Despite their vast potential, however, per capita income will remain well below that of advanced economies.

Over the coming decade, supportive demographics and technological developments could boost emerging markets' productivity and, consequently, economic growth. Furthermore, the energy transition and supply chain relocation will give these economies opportunities to leverage their abundant natural resources, ample workforce and manufacturing capabilities.

Despite these opportunities, emerging markets will traverse an evolving geopolitical environment marked by unresolved conflicts and other persistent disruptions. These countries must adapt to a world where policymakers — particularly within advanced economies — seem less willing to embrace limitless trade and globalization, adding complexity to emerging markets' growth prospects.

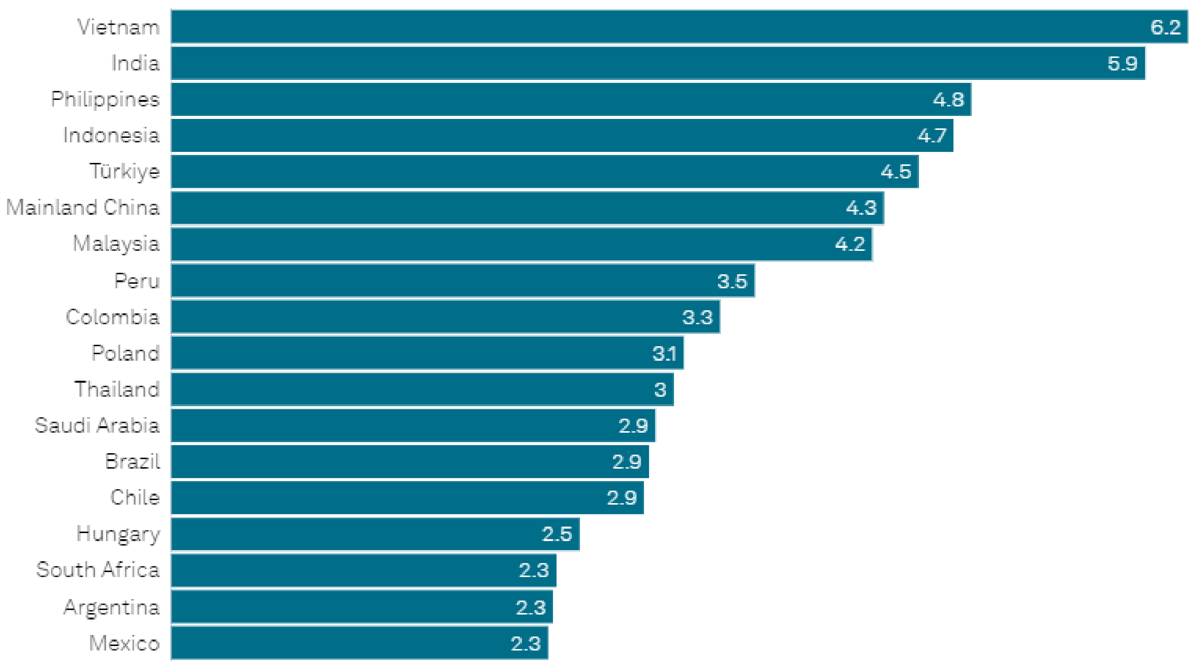
Emerging markets will drive global growth in the coming years, but the next decade will be pivotal for solidifying their progress. Supportive demographics, abundant natural resources, evolving trade dynamics, and technological innovations in energy and manufacturing could propel these markets to higher development stages. However, they will also face a complex global landscape with geopolitical disruptions, climate change risks, and the resurgence of industrial policies and protectionism in advanced economies. This intricate environment will present both emergent opportunities and multifaceted challenges for emerging markets as they strive to accelerate their advancement.

Emerging markets will drive economic global growth

Emerging markets will play a crucial role in shaping the global economy over the next decade, averaging 4.06% GDP growth through 2035, compared with 1.59% for advanced economies. By 2035, emerging markets will contribute about 65% of global economic growth. This growth will be driven mainly by emerging economies in Asia-Pacific, including China, India, Vietnam and the Philippines. Also by 2035, India will be cemented as the world's third-largest economy, with Indonesia and Brazil ranking eighth and ninth, respectively.

Vietnam, India to top annual GDP growth over next decade (%)

Average annual GDP growth 2024–2035



Data compiled Sept. 18, 2024.
Source: S&P Global Market Intelligence.

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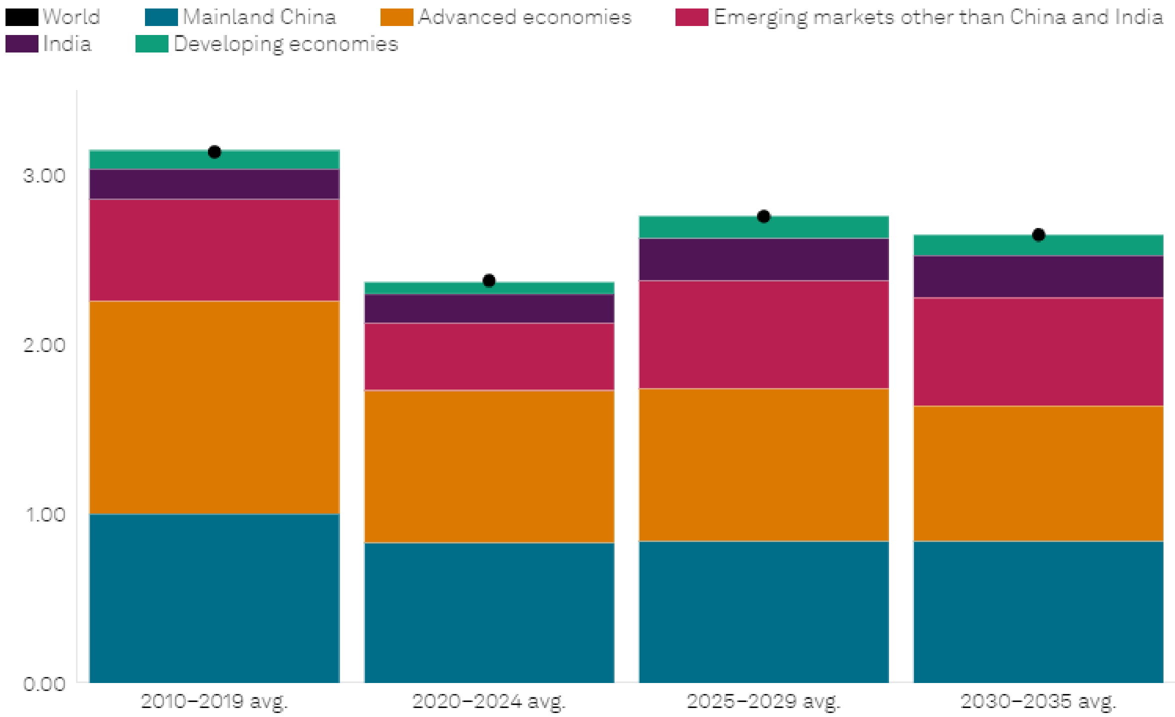
Mainland China's contribution to global GDP may beat advanced economies by 2030 (%)



Data collected Sept. 1, 2024.
Source: S&P Global Market Intelligence.

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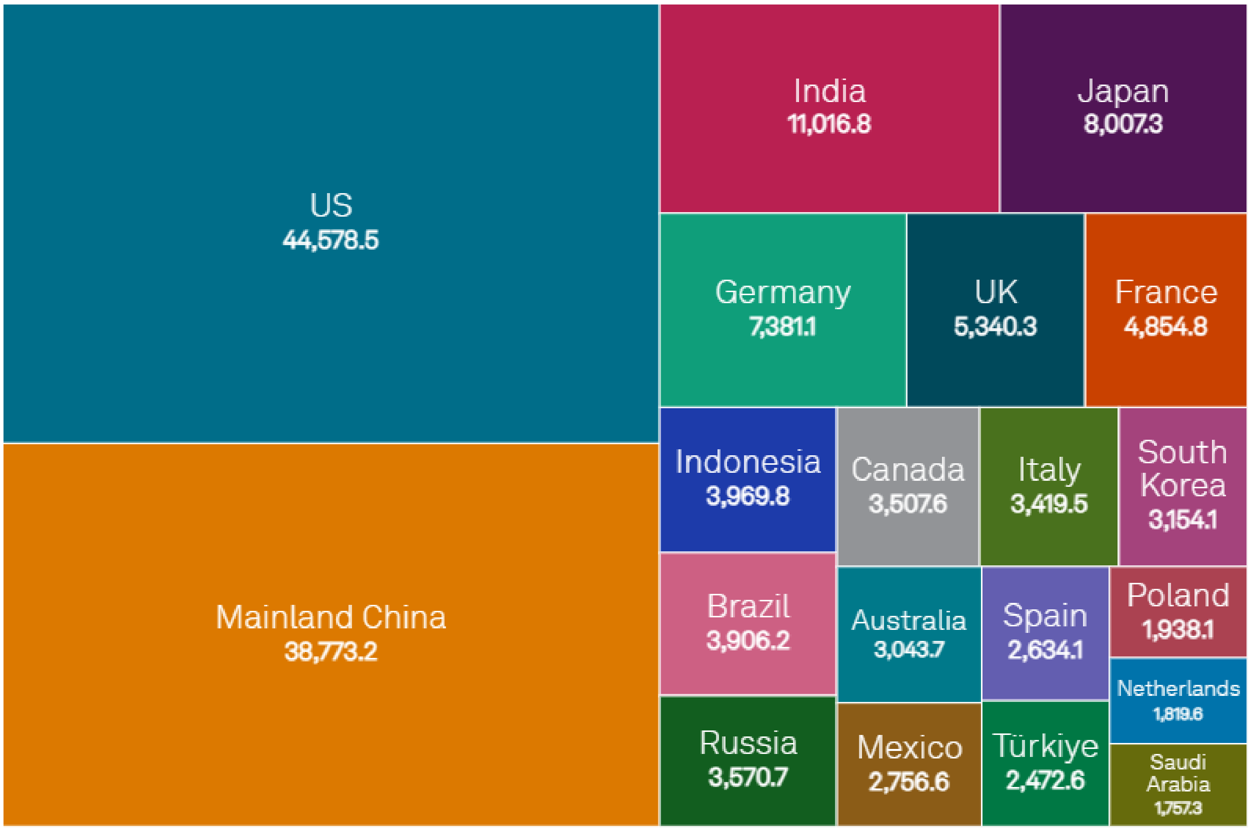
Despite their potential, emerging markets' growth will not be enough to match the per capita incomes of advanced economies (except for Saudi Arabia, Hungary and Poland). By 2035, the average GDP per capita in purchasing power parity for emerging markets will stand at 37% of that of advanced economies. As noted in this *Look Forward Journal* (see "Which emerging markets will climb the income ladder?" to learn more), faster income per capita convergence with advanced economies will be predicated on advancements in productivity growth across emerging economies. Their projected economic growth and importance will nonetheless drive future investment and significant growth opportunities.

Key emerging markets will rank in the top 20 largest economies by 2035

2035 projection of top 20 economies by nominal GDP (US$B)



Data collected Sept. 1, 2024.
Source: S&P Global Market Intelligence.

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By 2035, emerging markets will contribute about 65% of global economic growth.

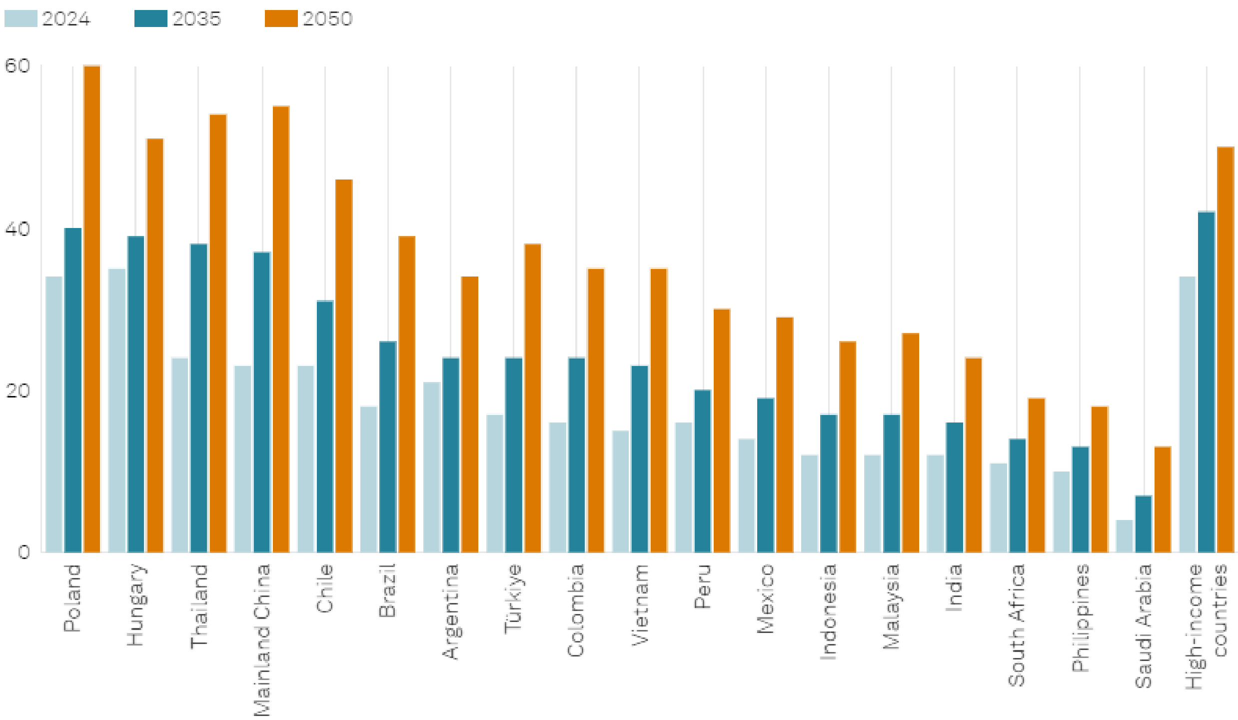
Demographics will continue favoring emerging markets

As global fertility rates decline, emerging economies have a unique opportunity to capitalize on their demographic bonus. Over the coming decade, most emerging markets will benefit from supportive demographics, with old-age dependent populations averaging 24% through 2035. This favorable demographic trend will expand their labor force and consumer markets. However, notable exceptions include China, Poland, Thailand and Hungary, all facing faster-aging populations. By 2050, emerging markets' old-age dependency ratio is expected to reach 35%, still well below the 50% expected for high-income countries.

Despite these advantages, the increasing dependent population will strain health services and fiscal accounts due to rising pension expenditures. To sustain a productive workforce, emerging markets must dedicate significant attention and resources to develop skills through education and technology.

Emerging markets' expanding populations a boon for economy

Old age dependency ratios for emerging markets vs. high-income economies (%)



Data collected Aug. 27, 2024.
Sources: United Nations, Department of Economic and Social Affairs, Population Division (2024); S&P Global calculations.

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Technology investment and adoption will be critical for emerging markets' development

Technological developments can boost emerging markets' productivity and, consequently, economic growth. However, in most emerging economies, research and development investment has been historically low, resulting in a lag in technological progress and adoption.

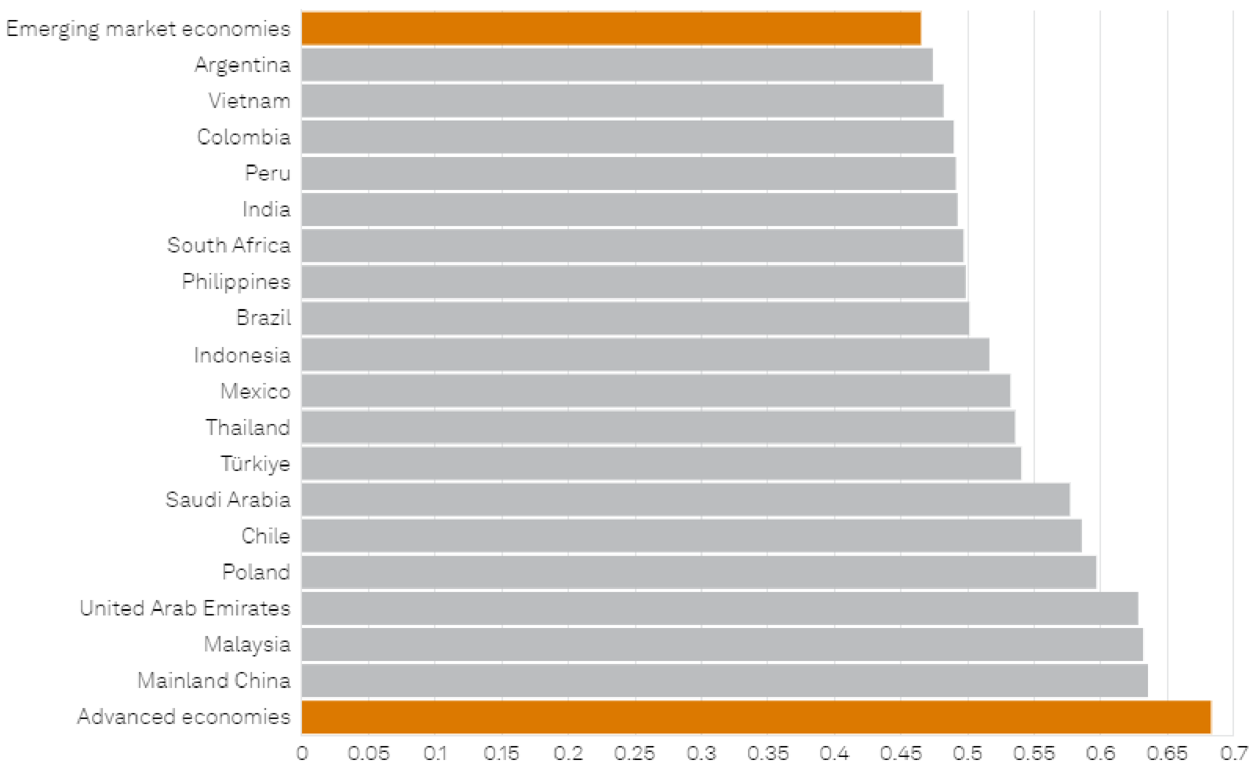
Over the coming decade, developments in AI, automation and advanced robotics will likely disrupt labor dynamics. These developments may impact emerging markets less than advanced economies due to the lower percentage of highly skilled workers in the former, resulting in an uneven boost in productivity that favors advanced economies. International

Monetary Fund research shows that emerging markets are less prepared for AI adoption, which could worsen global inequality.

New manufacturing technologies might also incentivize corporations to reshore production, particularly away from emerging markets exposed to higher political, operational and security risks (see "Competing with the future: Creating supply chain competitive advantage" to learn more). Accelerating technology adoption and digitalization of processes could improve emerging markets' productivity, which — combined with positive demographics — could bolster economic growth further over the coming years.

Emerging markets not as prepared for AI adoption

IMF AI Preparedness Index



Data collected Sept. 1, 2024.
Source: International Monetary Fund AI Preparedness Index, annual index as of 2023.

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The energy transition will position emerging markets that produce critical minerals in the spotlight

Global efforts to accelerate the energy transition and achieve sustainable development goals will boost demand for critical minerals. Copper, cobalt, nickel and lithium, in particular, are essential in electric vehicle and battery production, as well as other key components for producing renewable energy. Such demand growth will be exponential.

A joint study from S&P Global Market Intelligence and S&P Global Commodity Insights on copper and the energy transition found that copper demand — key for electrification — is projected to double from 25 million metric tons (MMt) today to about 50 MMt by 2035. In the case of lithium, a 2021 European Parliament report stated that for Europe to meet its energy transition targets, demand would need to increase 18 times by 2030 and 60 times by 2050.

Leaders in mining and processing minerals for the energy transition include China (copper, cobalt, nickel and lithium), Chile (copper and lithium), Peru (copper) and Indonesia (nickel). Initiatives across advanced economies aim to diversify supply and secure strategic access to these minerals, likely boosting investment in emerging markets with large reserves. These initiatives include the Minerals Security Partnership and the US Inflation Reduction Act, which extends benefits to countries that have free trade agreements with the US.

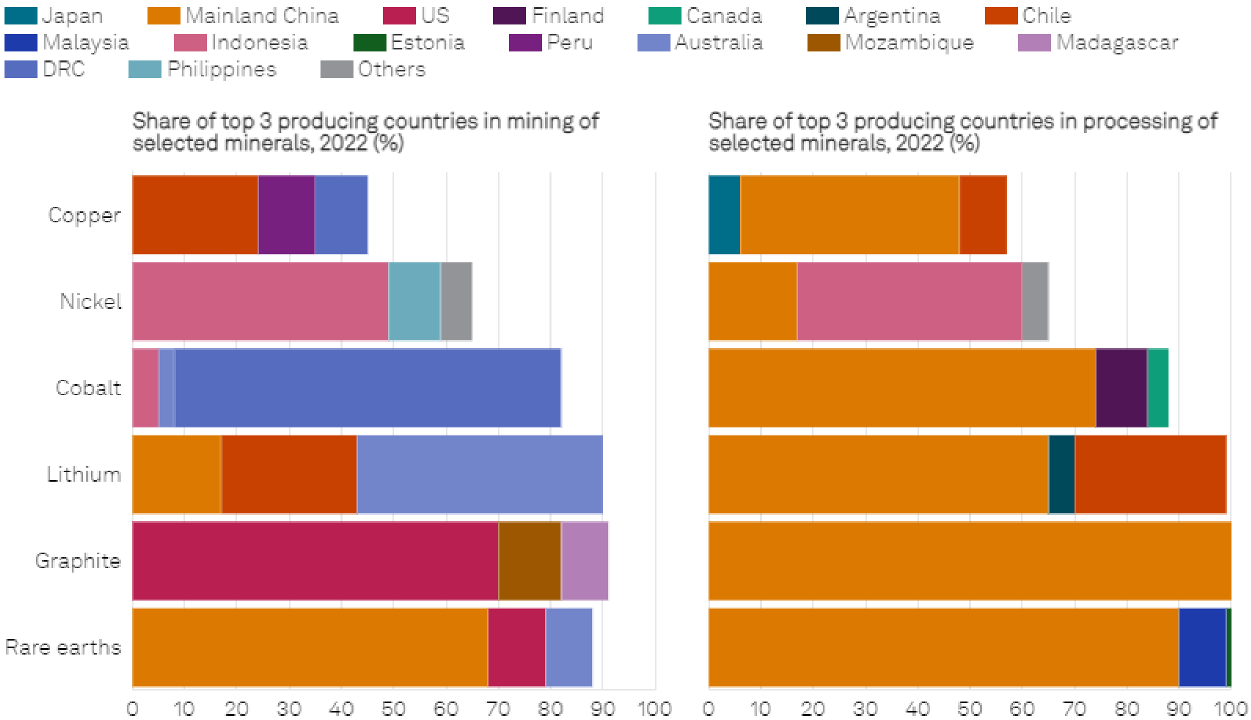
To take advantage of foreign investment opportunities, some emerging markets are already creating new incentives through policy changes and infrastructure improvements.

The Indonesian government banned nickel exports to foster domestic higher-value processing and sought to create an EV supply chain by introducing supportive policies to attract manufacturers and battery-makers. These policies include a lower value-added tax on EVs, labor liberalization and reduced corporate taxes.

In Latin America, Argentina is seeking to boost development of its lithium sector by promoting private sector investment through an investment attraction scheme known as Régimen de Incentivo para Grandes Inversiones (RIGI), applicable to strategic sectors, including mining. Chile has one of the world's largest reserves of lithium, a mineral classified as strategic, with the state playing a major role in its development but also allowing associations with the private sector.

Sub-Saharan African countries with significant reserves of copper and cobalt, such as the Democratic Republic of Congo, are also seeking to address pervasive infrastructural deficits to attract more foreign investment.

Emerging markets play a relevant role in critical metals for transition



As of March 2022.
DRC = Democratic Republic of Congo.
Source: International Energy Agency, Paris, 2022.

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Worsening physical risks call for proactive measures

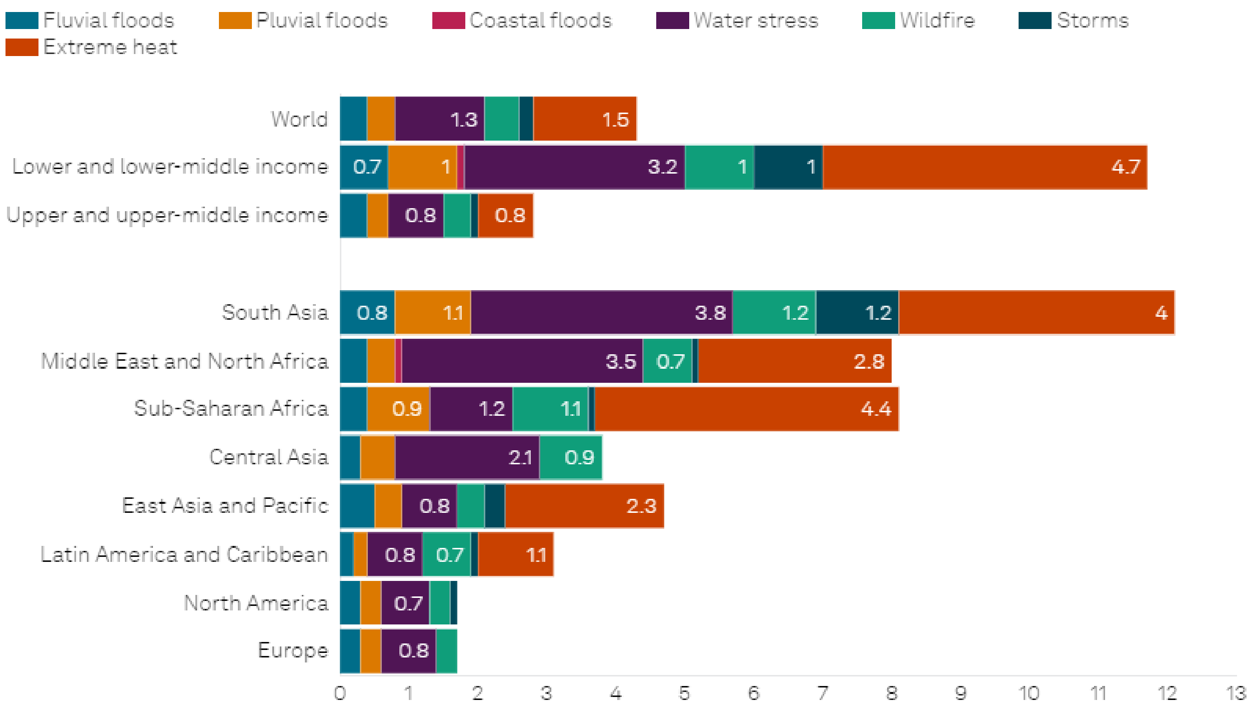
Extreme weather conditions and worsening physical risks will likely remain a constant source of disruption for years to come, generating economic and financial losses. Supply chain disruptions and infrastructure damage associated with physical risks such as extreme heat, water stress, drought, flooding, wildfires and tropical cyclones have now become increasingly common. By 2050, if global warming does not stay well below 2 degrees C, absent adaptation, we estimate that up to 4.4% of the world's GDP could be lost annually.

Emerging and frontier markets are among the most exposed globally. Their exposure to these risks will test their economic resilience and adaptability. According to the "United Nations Environment Programme Annual Report 2023," estimated annual adaptation needs range from $215 billion to $387 billion (i.e., 0.6%-1% of frontier economies' GDP) per year for this decade. As a result, vulnerable countries could continue to fall behind their wealthier counterparts, leaving their population and economic development efforts exposed to accelerating physical climate risks.

Adapting and building resilience to the physical impacts of climate change remains highly location-specific. Investment needs will manifest differently in terms of hazard type and impact. Storms will typically remain more prominent in South Asia, East Asia and Pacific, and the Caribbean than in land-locked nations in Central Asia, the Middle East and North Africa, and sub-Saharan Africa. Economic losses due to water stress — a chronic risk that materializes slowly over time — will be particularly pronounced in Mexico, southern Argentina, India, the Middle East and North Africa, and southern Africa.

Exposure to the most adverse risks resulting from climate change is heterogenous (%)

Annual GDP at risk by 2050 by climate hazard and region, under a slow transition scenario (SSP3-7.0) absent adaptation



As of Dec. 2022.
Upper income = Upper-middle and high income; lower income = low and lower-middle income, based on World Bank data. GDP at risk represents the share of GDP that could be lost annually due to high exposure to physical climate risks, in the absence of adaptation to climate risk, without accounting for changes in the economic geography and structure and assuming all hazards occur every year. SSP3-7.0 is a moderate- to high-emissions scenario.
Sources: S&P Global Sustainable1; S&P Global Ratings.

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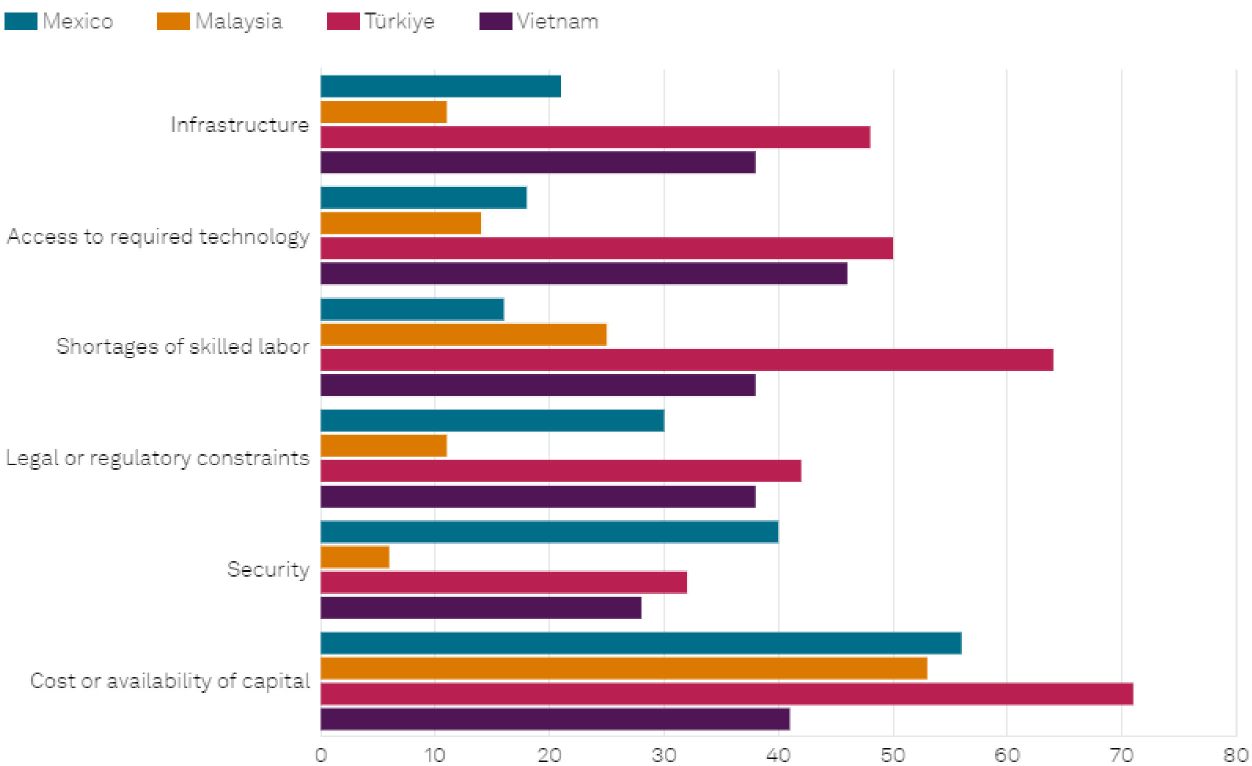
Supply chain relocation will remain a key trend that could benefit emerging markets

Nearshoring and friendshoring have gained attention as supply chain disruptions during the COVID-19 pandemic prompted manufacturers to diversify their operations' locations.

Strategic competition between the US and China and the impact of Russia's invasion of Ukraine have also encouraged companies to reconfigure their supply chains.

Mexico's long-standing manufacturing ties with, and access to, the US market make it an obvious potential beneficiary for nearshoring. The impact on Mexico's economy could be substantial even if only a small fraction of manufacturing production is shifted into the country from other hubs. However, Mexico faces significant challenges to reaping the benefits of nearshoring that, if not addressed, could undermine its growth potential over the next decade. These include inadequate infrastructure, security concerns and a lack of political impetus for regulatory improvements and initiatives to attract foreign direct investment.

Challenges preventing firms from capitalizing fully on reshoring growth opportunities over next 12 months (%)



Data compiled May 30, 2024.
Sources: S&P Global PMI® Special Reshoring Survey; S&P Global Market Intelligence.

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The global relocation of supply chains will also benefit Vietnam. The country's ties with the US have been developing quickly, even before the pandemic. Vietnam's exports to the US have increased fourfold since 2013 and accelerated following tariffs imposed on China in 2018. The country became the seventh-largest goods supplier to the US in 2023. We estimate that Vietnam could become one of the fastest-growing emerging markets by 2035, buoyed by policy consistency and a focus on reinforcing its trade potential. Vietnam's strong presence in evolving global supply chains will be determined by sustained progress in addressing infrastructural, labor and resource constraints.

India is poised to be the fastest-growing major economy over the next three years and the third largest globally by 2030. Its 2024 entry into JP Morgan's Government Emerging Market Bond Index could provide additional government funding and unlock significant resources in domestic capital markets. This is only a first step — investors will continue looking for improved market access and settlement procedures.

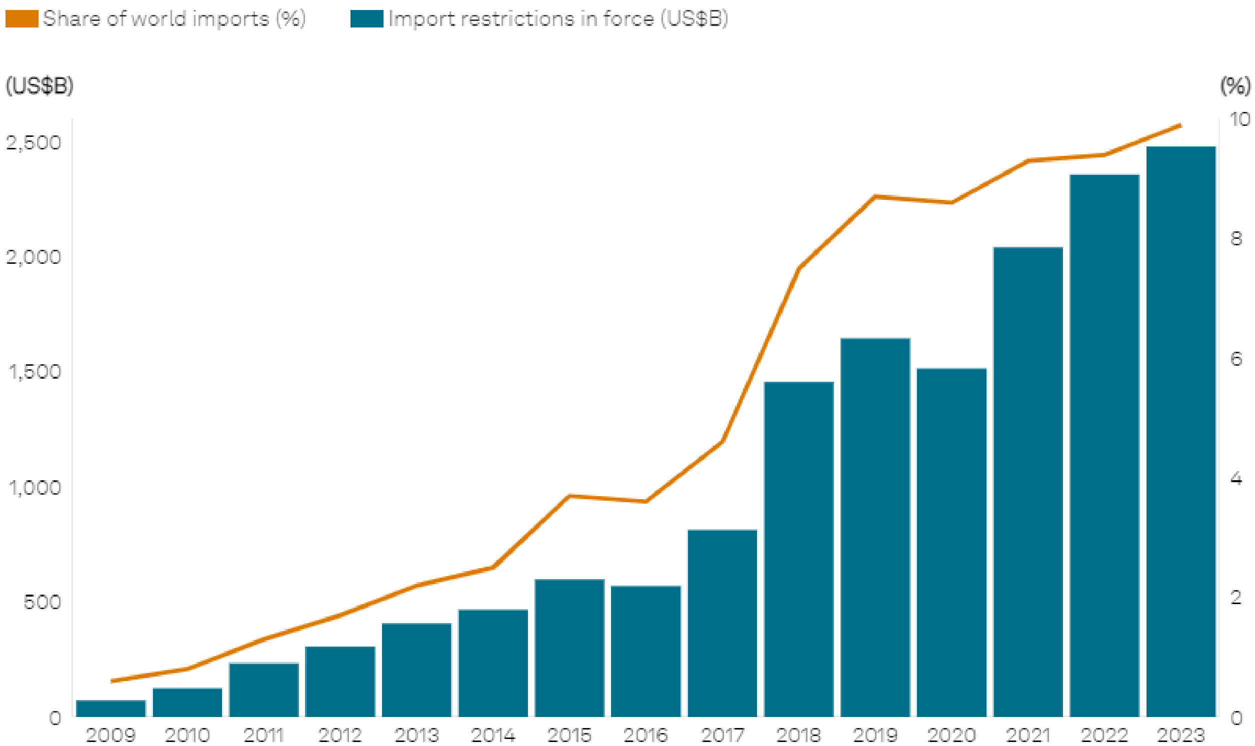
India has also taken measures to improve its weak fiscal flexibility by boosting its capital expenditure, further supporting long-term growth. But population challenges are meaningful, with the country expected to have the world's largest population by 2035. This presents mounting challenges in basic service coverage and growing investment needs to maintain productivity.

Emerging markets will need to navigate a complex global landscape with challenges to frictionless trade and investment

Emerging markets are navigating an evolving geopolitical environment, where disruption will likely remain a constant and alliances more fluid. Policymakers — especially in advanced markets — are less willing to embrace free trade and instead orient their policies around strategic competition.

Many emerging markets are positioning themselves to leverage this as an opportunity to rebalance, creating more resilience through diversification of partners. Still, emerging economies will be exposed, by varying degrees, to the immediate disruptive impacts of unresolved and latent armed conflicts as well as the increasing national security considerations underpinning economic and trade policies. How adeptly emerging markets traverse these more volatile dynamics will determine growth prospects as trade and investment flows recalibrate.

Cumulative trade coverage of import-restrictive measures on goods since 2009

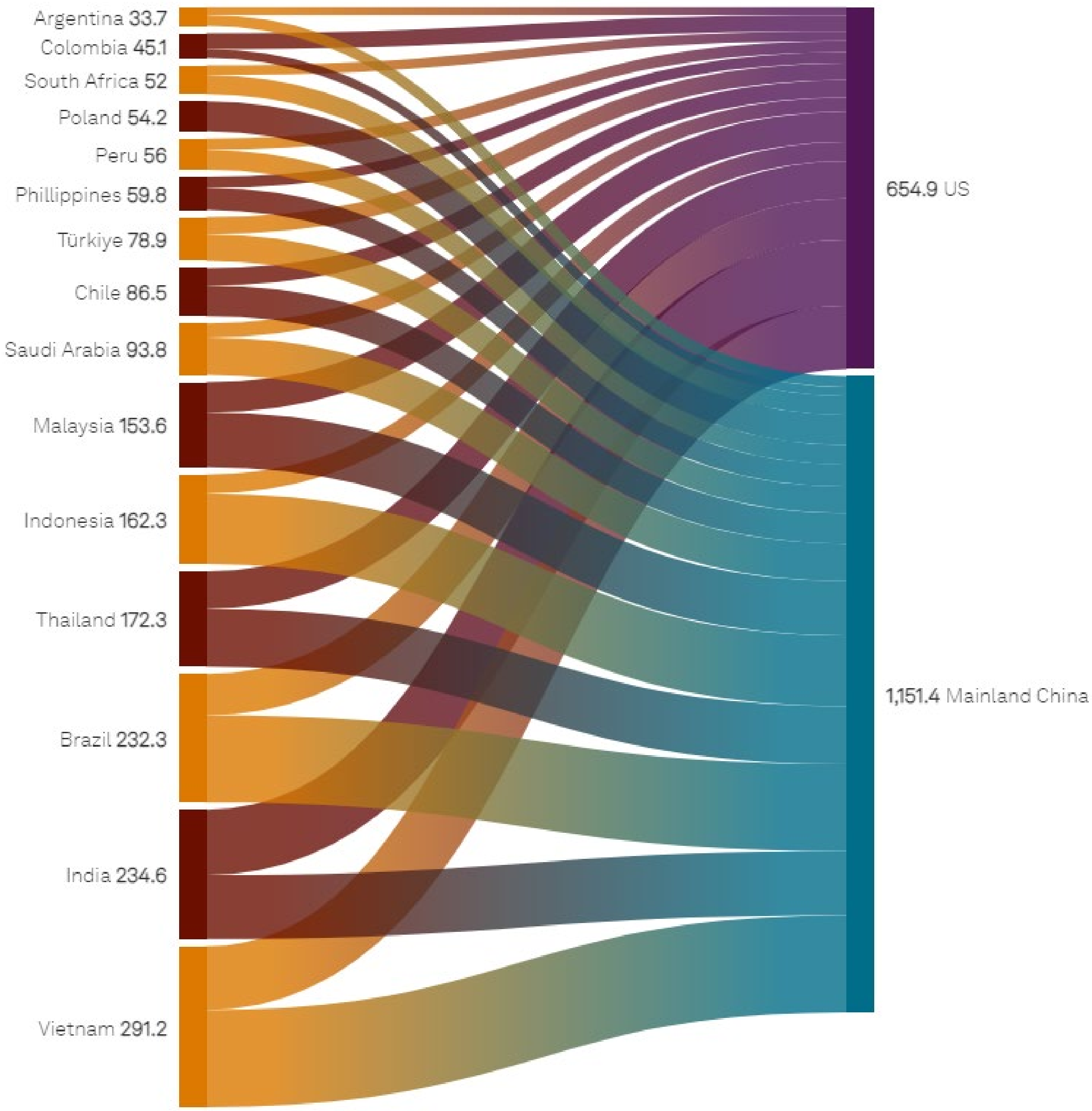


Data accessed Sept. 3, 2024.
Source: World Trade Organization end of year trade monitoring report 2023.

https://public.flourish.studio/visualisation/19523665/

Our trade-related data highlights that the US and China are primarily either the main or second trade partner for most emerging markets. This strategic rivalry could increase pressure for emerging economies to curb flexibility in trade relations and investment on areas considered to be strategic (manufacturing, EVs, critical minerals, telecommunications, ports, electricity transmission, etc.), which would likely make the path to achieve their accelerated growth ambitions more challenging. To date, the behavior of most emerging markets highlights that hedging between the US and China to deepen trade links or secure capital will continue over the next decade, as will expanding trade linkages within respective regions and across emerging markets.

How emerging markets* trade with US, mainland China (US$B, 2023)



As of April 8, 2024.
* Excluding Mexico. Out of all emerging markets, Mexico has the largest trade relationship with the US, totaling $759.4 billion in 2023.
Source: S&P Global Market Intelligence.

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Two global trends to watch that will particularly impact emerging markets are the rise of industrial policy within advanced economies and the emergence of extraterritorial legislation.

As advanced economies increase subsidies to protect strategic sectors, secure jobs and boost technological innovation, the ability of emerging markets to compete on a level playing field will be compromised. Similarly, the emergence of extraterritorial legislation, particularly from the EU, will add another layer of complexity to attracting investment. Legislation such as the EU's Corporate Sustainability Due Diligence Directive (CS3D) will provide an opportunity for emerging markets to adapt operations and supply chains to the EU's environmental, labor and human rights standards. Companies operating in emerging markets will need to conduct due diligence to ensure such standards are met across operations and supply chains.

Emerging markets struggling to adapt, however, will likely face foreign direct investment limitations. Rather than risk fines of up to 5% of net worldwide turnover, companies operating in CS3D-transgressing jurisdictions might opt for ceasing operations. Emerging markets' willingness to work with the private sector and their ability to maintain a stable, predictable environment and plan for the future (see "Planning for the future: Growth targets for the next decade" to learn more) will be key over the next decade.

Learn More

- 2024: A disjointed world
- India Look Forward: Emerging Perspectives
- Economic Research: Development Needs Explain Transition Costs In Emerging Markets
- Economic Research: Examining How Higher And More Efficient Investments Can Boost Emerging Markets' Growth

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Planning for the future: Growth targets for the next decade

Emerging markets are striving for ambitious long-term growth goals, but domestic factors such as policy favorability, institutional strength, logistics resilience and market potential mean they will launch into the next decade from significantly different starting points.

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Highlights

Policymakers in emerging markets have set ambitious growth targets for the next decade that favor economic diversification, infrastructure development and skill advancement. Their strategies consider a changing global order where limits on unrestricted trade and globalization, conditional flow of capital, and availability of skilled labor can impede growth.

Emerging markets' journey into the next decade will be characterized by divergence. Macro-level data on market potential, policy favorability, institutional quality, logistics efficiency and resource availability (labor and financial capital) illustrate how emerging markets such as Malaysia are set to reach new heights. Brazil, Indonesia and India are positioned to grow their economies, while Mexico and China are currently backsliding.

Case studies of three emerging markets with long-term development strategies highlight this divergence: South Africa has promising growth potential but will fall short of its 2030 growth objective; strong political will in Saudi Arabia is risk-positive, pending inflows of international investment; and Malaysia’s next frontier of economic gains is closely linked to labor upskilling plans that will enhance its competitiveness over the next decade.

As the next decade approaches, the economic trajectory of emerging markets will likely be heavily influenced by their governments' design and execution of long-term growth strategies. Establishing ambitious long-term growth goals provides a clear roadmap for progress. These goals indicate that policymakers are planning for the future, identifying

vulnerabilities and prioritizing strategic areas to mobilize capital and investment alongside the private sector.

High ambitions for the next decade and beyond

Emerging markets are setting long-term goals that tend to converge on establishing long-term growth targets. India, as established in India@2047, aims to become a $30 trillion economy from the current $3.6 trillion by 2047. Saudi Arabia's Vision 2030 plan aims to grow its economy from the 19th largest worldwide to the top 15 by 2030. Similarly, Malaysia, under the Madani Economy Framework, seeks to move its economy from the 37th largest to the top 30 by 2033. Via long-term development plans, South Africa has set a target of achieving an annual average 5.4% GDP growth by 2030; annual GDP averaged 1.3% over the past two years. Peru is also pursuing a nominal purchasing power parity GDP per capita of $30,000 by 2050 from a base of $17,800 in 2023.

Select long-term development programs

South Africa's National Development Plan

- GDP growth of 5% by 2030
- Average per capita GDP of 110,000 rand by 2030
- Average exports annual growth in total volume of 6% per year by 2030
- 90% access to grid electricity

Saudi Vision 2030

- Rank among the top 15 global economies
- Increase foreign direct investment (FDI) levels so they reach 5.7% of GDP
- Increase small and medium enterprises (SME) contribution to GDP from 20% to 35%
- Increase private sector's contribution from 40% to 65% of GDP

Malaysia Madani Economy Framework

- Rank among the top 30 global economies
- Rank among the 25 least corrupt countries
- Become a top 12 globally competitive country
- Rank among top 25 countries for human development

As of Sept. 16, 2024.
Sources: Report on Monitoring National Development Plan Indicators and Targets, National Planning Commission, Presidency Republic of South Africa; Saudi Vision 2030, Kingdom of Saudi Arabia; Ekonomi Madani: Memperkasa Rakyat, prime minister's office of Malaysia.

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Emerging markets' long-term development plans typically center on seven key areas essential for maximizing future growth: economic diversification, infrastructure development, skill development, sustainable development, digitalization, foreign direct investment incentives and institutional reforms. Public-private partnerships and the promotion of entrepreneurship and small and medium-sized enterprises also feature prominently, with most favoring a close relationship with the private sector and export-led growth.

Emerging markets are also setting sector-specific objectives. For example, Chile wants to become a major producer of lithium and green hydrogen, and Vietnam aims to secure a 10% share of the world's semiconductor market by 2030 through its National Semiconductor Industry Strategy.

Growth trajectories will diverge over the next decade

Emerging markets are set to drive global economic growth over the next decade, averaging 4.06% GDP growth through 2035, compared to 1.59% for advanced economies. Grouping them, however, overshadows their divergence and intrinsic domestic characteristics.

Mapping macro-level data on market potential, policy favorability, institutional quality, logistics efficiency and resource availability (labor and financial capital) highlights how emerging markets will begin their journey into the next decade from different starting points[1]. By measuring the momentum of emerging markets over time across these five thematic areas[2] and the current state of their market potential to generate opportunities for the private sector, our analysis shows that Malaysia stands out exceptionally among its peers, owing to strong progress in enacting business-friendly policies and logistics efficiency.

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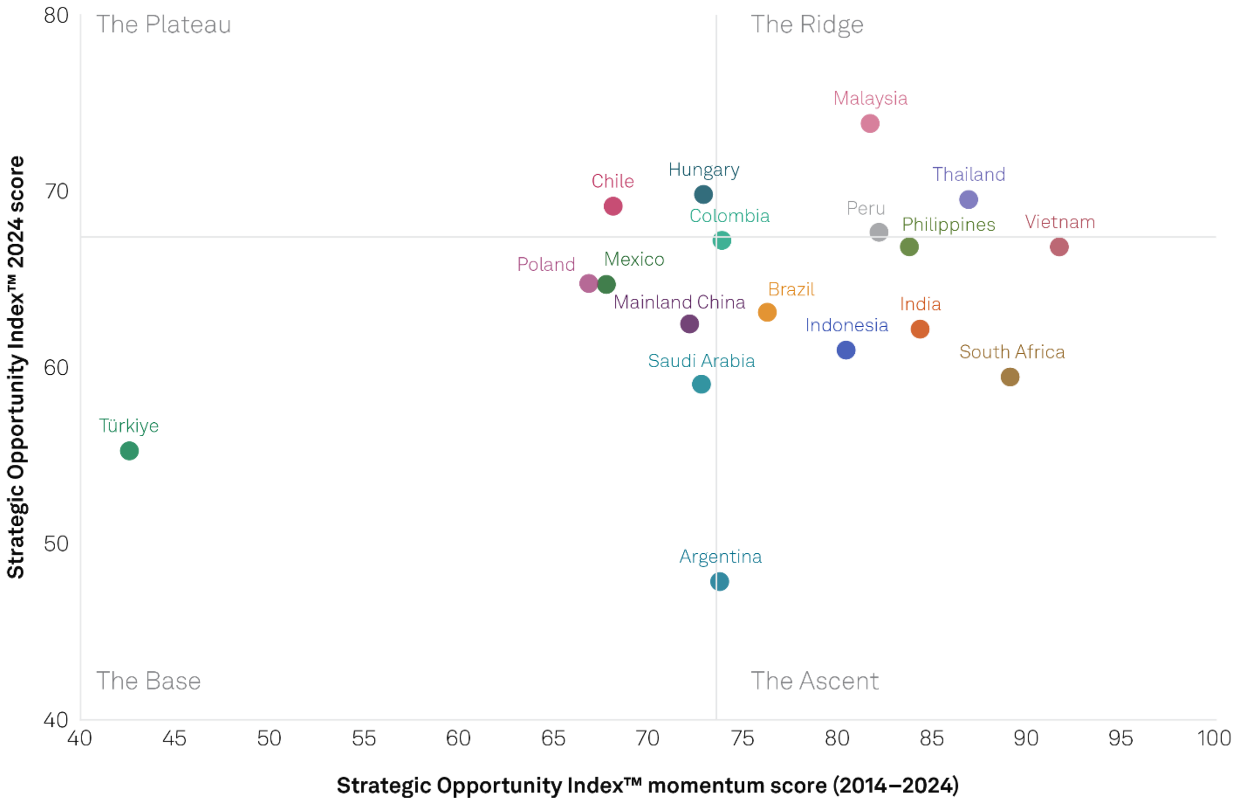
[1] This diagram is based on a Strategic Opportunity Index™ (SOI™) that utilizes S&P Global Market Intelligence data to provide a comprehensive and comparable view of more than 90 markets, covering more than 98% of global GDP. The SOI™ measures the state of a market and its potential to generate opportunity for enterprise. It encompasses a range of factors that make a market attractive and viable for enterprise. The data provides users with current and historical insights on the economic, regulatory, policy, institutional, logistics, supply chain, trade and resource questions through harmonized data. These data are organized into aggregated pillars of the SOI™ framework that speak to the five key drivers of the macro environment: market potential, policy favorability, institutional quality, logistics efficiency and resource availability. These scores are compiled with data as of June 5, 2024. Market potential measures the extent to which the domestic market is open, innovative and attractive for new business opportunities. Policy favorability measures the extent to which government policies, regulations and tax code support and encourage new enterprise. Institutional quality measures the strength and effectiveness of a country's institutions, including legal and financial institutions. Logistics efficiency measures the effectiveness and reliability of a country's logistics and supply chain infrastructure. Resource availability measures the accessibility and adequacy of the necessary resources for conducting business operations in a given market, specifically finance and labor.

[2] The Strategic Opportunity Index™ (SOI™) Momentum Score measures how the markets have changed over the past 10 years from the perspective of the index. Momentum scores are calculated from the growth rates (CAGRs) and are normalized to provide a comparable score that focuses on the trajectory of the country, regardless of the current SOI™ ranking. The markets that have improved the most are ranked the highest on momentum scores. This approach lets users understand and identify markets where opportunities are expanding.

The landscape for key emerging markets



The Ascent	The bottom 50% of markets today that score in the top 50% of markets in momentum. They have made improvements relative to their peers on "The Base" and have potential to rise to "The Ridge" if they can maintain momentum.
The Base	The bottom 50% of markets today that score in the bottom 50% of markets in momentum. They are declining or stagnating, and have the greatest opportunity for improvement.
The Plateau	The top 50% of markets today that score in the bottom 50% of markets in momentum. Many of these markets are mature and still setting the bar, although change is less dynamic compared to markets on "The Ridge."
The Ridge	The top 50% of markets today that score in the top 50% of markets in momentum. They have achieved a strong position relative to their peers and are the most dynamic. They are poised to reach new heights.

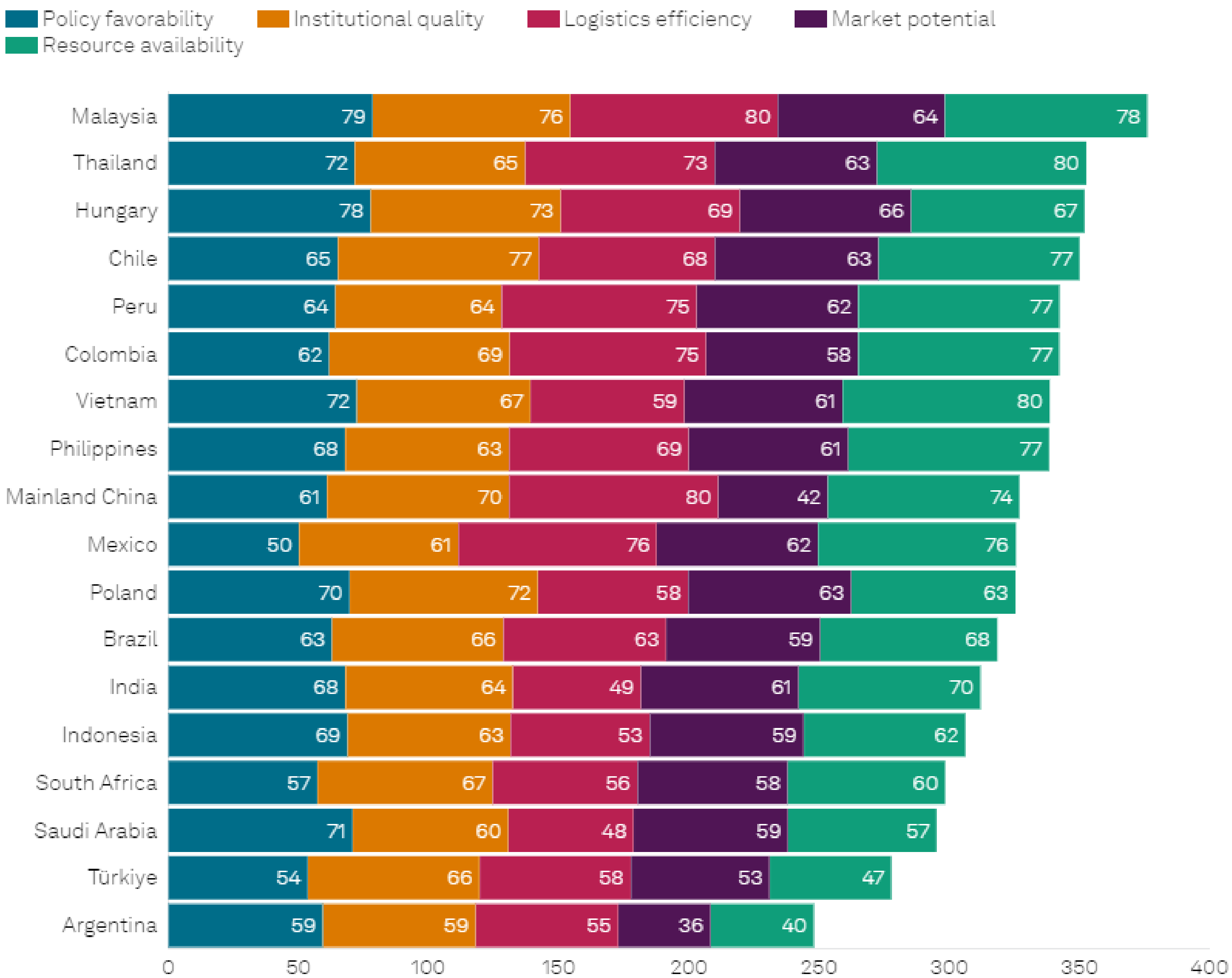
As of Sept. 16, 2024.
Source: S&P Global Market Intelligence.

https://public.flourish.studio/story/2517017/

India, Indonesia and Brazil have made improvements relative to their peers and have the momentum to ascend over the next decade. India boasts high momentum in policy favorability, while Brazil and Indonesia made gains in resource availability (labor and financial capital).

Economies such as those of China and Mexico exhibit slower momentum but have ample opportunity to continue rising from a strong base. Mexico faces challenges with its institutional capacity, while the Chinese market's attractiveness for new business opportunities is decreasing. Chile, in contrast, has plateaued, with its momentum slowing due to the deterioration of its institutional quality score.

Malaysia tops Strategic Opportunity Index™ 2024 ranking of emerging markets



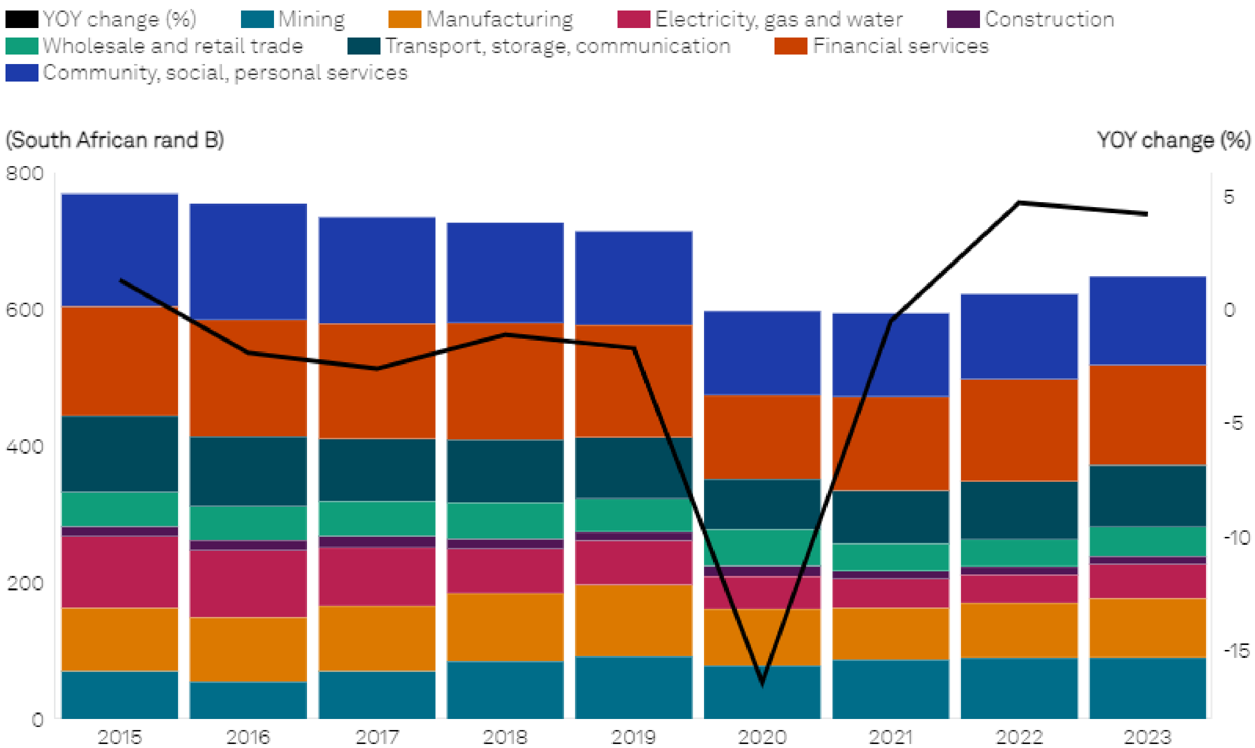
Data compiled Aug. 4, 2024.
Source: S&P Global Market Intelligence.

https://public.flourish.studio/visualisation/19448153/

Case study: South Africa

South Africa has so far made little progress in reaching the targets set in its 2012–2022 National Development Program (NDP), now extended through 2030. Annual real GDP growth averaged 1.1% during 2012–2022, well below the 5.4% NDP target. In recent years, the country has grappled with fiscal constraints, weaker institutions and infrastructure bottlenecks, particularly in state-delivered energy, rail and port services. These factors combined to slow the NDP's implementation, with gross fixed capital formation falling to 14.1% of GDP in 2022 from 19.3% of GDP in 2010.

Gross capital formation (South African rand B, 2015 prices)



As of July 2, 2024.
Source: S&P Global Market Intelligence.

https://public.flourish.studio/visualisation/19448244/

Although South Africa's economy is highly unlikely to meet the NDP's growth target, we expect potential GDP growth to increase by an estimated 1 percentage point to 2.5% for 2025–2026 and to 2.76% by 2030 as key infrastructure bottlenecks are eased and gross capital formation and labor productivity strengthen.

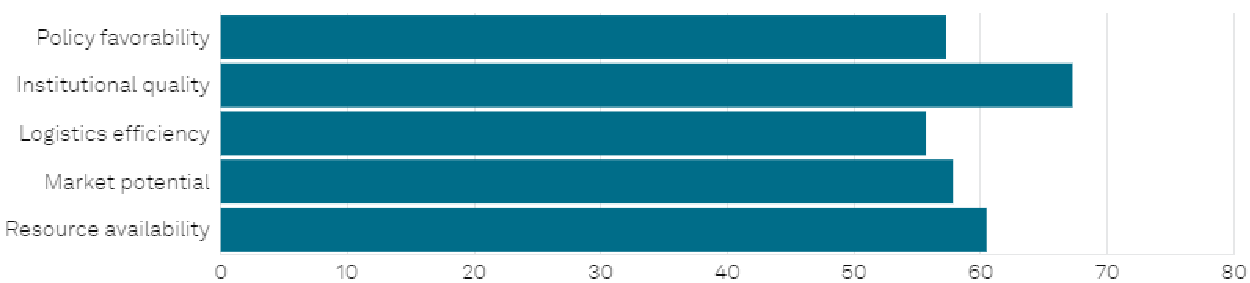
Although South Africa's economy is highly unlikely to meet the NDP's growth target, we expect potential GDP growth to increase by an estimated 1 percentage point to 2.5% for 2025–2026 and to 2.76% by 2030 as key infrastructure bottlenecks are eased and gross capital formation and labor productivity strengthen. We also expect a more favorable political environment for passing and executing planned policy changes, with the potential to optimize the operating environment in the energy, rail and port sectors due to the new Government of National Unity's more constructive approach to the private sector.

Growing priority sectors such as energy, mining, tourism and manufacturing, among others, will require a stronger commitment to public-private partnerships due to existing fiscal constraints.

Two important sectors to watch through the end of the decade are the power and rail sectors. We are optimistic about the Electricity Regulation Amendment bill, passed in May 2024, as it will ease electricity production and sales. This will ultimately improve the reliability of electricity supply and allow more consumer choice, encouraging investment and innovation in energy generation. A significant expansion of South Africa's electricity transmission infrastructure over the next 10 years will be necessary for the successful implementation of the renewable energy program envisioned in the NDP.

South Africa

Strategic Opportunity Index™ 2024 scores



Data compiled Aug. 5, 2024.
Source: S&P Global Market Intelligence.

https://public.flourish.studio/visualisation/19448773/

Implementing public-private partnerships will be key through 2030 to improve Transnet Freight Rail, the state-owned rail freight logistics and passenger transport company, which has faced significant challenges, resulting in falling volumes and a deteriorating railway system. In March 2024, Transnet published its first draft Network Statement, establishing rules for private sector third-party access to the rail network. Rail reform is part of Transnet's recovery plan and aims to position rail as an affordable, competitive and reliable mode of transport.

Transnet National Ports Authority has furthermore awarded contracts to private companies to operate and develop South Africa's largest ports, Durban and Richards Bay. Private sector participation and access to financing are likely to strengthen port performance over the medium term. The phased development of South Africa's infrastructure in energy, rail and ports will ultimately strengthen potential growth and economic diversification, improving the country's growth prospects through the next decade.

Key policy reforms to address infrastructure bottlenecks that began before the May 2024 elections

Implementation will continue under the Government of National Unity. Potential growth will increase by 1 percentage point.

Energy

The **Electricity Regulation Amendment (ERA) bill** makes it easier to produce and sell electricity in the country.

National Transmission Company South Africa (NTCSA, owned by Eskom) started operating July 1.

The decommissioning of coal-fired power stations extended to 2030 from 2025.

Ports

The development and operation of Durban, Richards Bay and Mossel Bay ports by the private sector.

Railways

The **Network Statement** sets the rules for third-party access to the rail networks.

Skills shortages

New remote visa options for foreign workers.

Mining

Eliminate the mining license backlog.

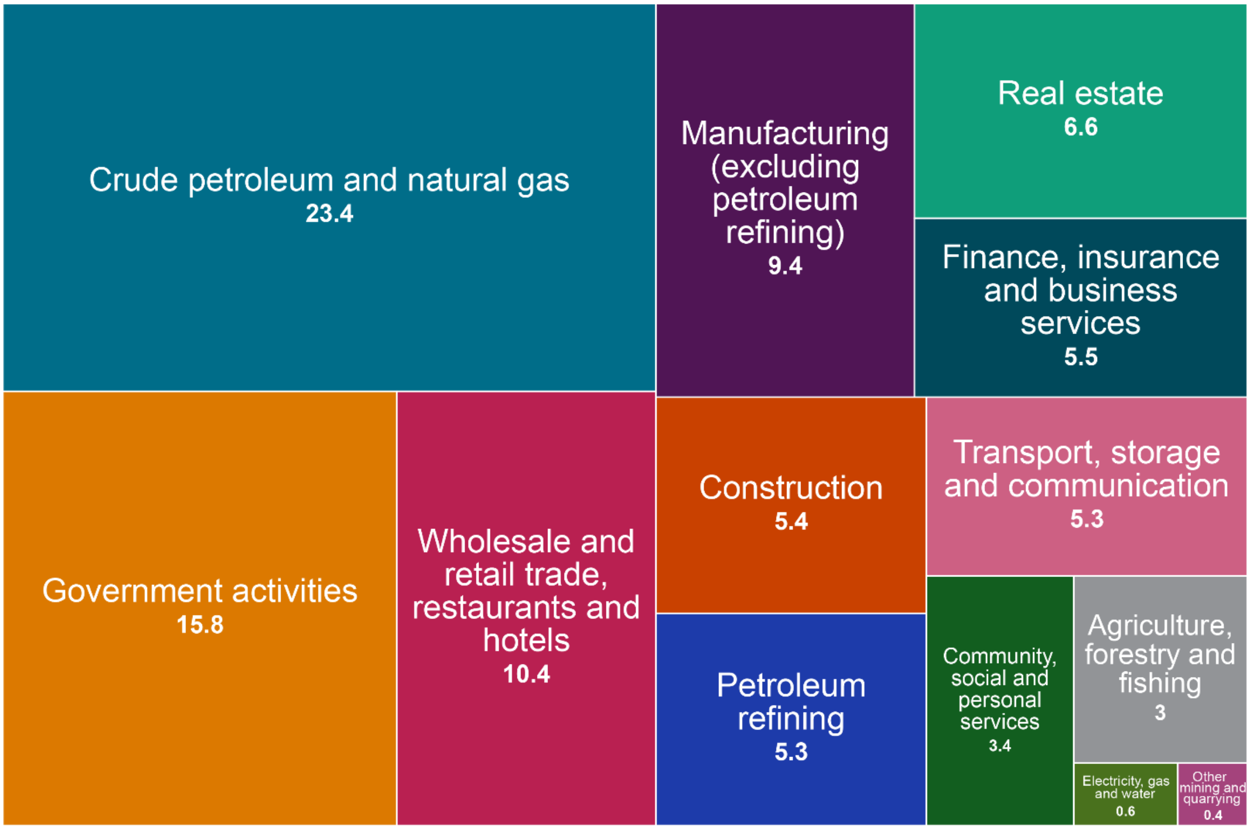
As of Sept. 18, 2024.
Source: S&P Global Market Intelligence.

https://public.flourish.studio/visualisation/19461904/

Case study: Saudi Arabia

Saudi Arabia is ahead of G7 economies in purchasing power parity GDP per capita, a position unlikely to change through 2030. Although our projections show that Saudi Arabia will improve in economic size, it is forecast reach the top 18 globally, rather than its target of top 15, by 2030.

With the establishment of the Council for Economic and Development Affairs (CEDA), chaired by the now-Crown Prince Mohammed bin Salman, the government has shown increased political willingness to advance its vision for 2030 with direct accountability and project oversight. Since CEDA's inception in 2016, notable milestones include lifting restrictions on women participating in the workforce, increasing private home ownership and developing a domestic mining industry.



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Improving its business environment will be essential to achieving Saudi Arabia's foreign direct investment (FDI) targets ($100 billion by 2030), particularly when FDI was only $19.3 billion in 2023. Despite strong government commitment, FDI levels have declined across the region, partly due to the regional geopolitical environment.

In the coming years, efforts to improve Saudi Arabia's relative regional attractiveness will focus on its regional headquarters program, which provides incentives for companies to establish their regional headquarters in Saudi Arabia. These incentives include exemptions to the quota for employing Saudi nationals, 30-year income and withholding tax exemptions, and priority access to government tenders.

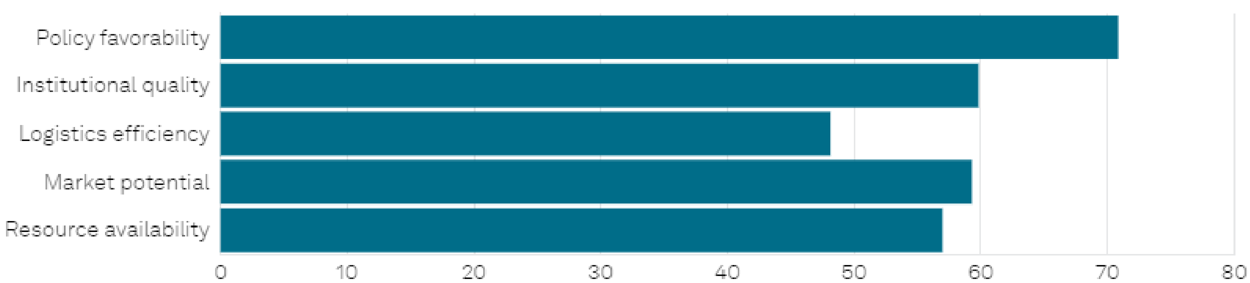
In the coming years, efforts to improve Saudi Arabia's relative regional attractiveness will focus on its regional headquarters program, which provides incentives for companies to establish their regional headquarters in Saudi Arabia. These incentives include exemptions to the quota for employing Saudi nationals, 30-year income and withholding tax exemptions, and priority access to government tenders.

A critical issue to watch is the progress of institutional reforms to ensure further investment stability. External expertise and investment are necessary for Saudi Arabia to effectively establish a domestic mining sector to support electric vehicle manufacturing and to facilitate access to raw materials and minerals required for the energy transition. The introduction of a more codified legal system, particularly the Law of Evidence, Civil Status Law and the Civil Transactions Law, all introduced between 2021 and 2023, is likely to increase external business confidence but may face initial impediments due to limited judicial capacity. Most of the key economic diversification sectors selected as core pillars of the Vision 2030 program, such as mining, telecommunications, advanced manufacturing and banking, will require robust and institutionalized legal frameworks if they are to attract significant external investment.

The neighboring United Arab Emirates and Bahrain also offer investment opportunities in the region. Saudi Arabia, however, has a strong base for improvement through 2030 and beyond due to its financial resources. The Public Investment Fund will likely continue as the main source of finance for many of the Vision projects; its assets increased to $940.26 billion in 2024 compared with $776.7 billion in 2023, and it has a stated target of $2.7 trillion by 2030.

Saudi Arabia

Strategic Opportunity Index™ 2024 scores



Data compiled Aug. 5, 2024.
Source: S&P Global Market Intelligence.

https://public.flourish.studio/visualisation/19448636/

Case study: Malaysia

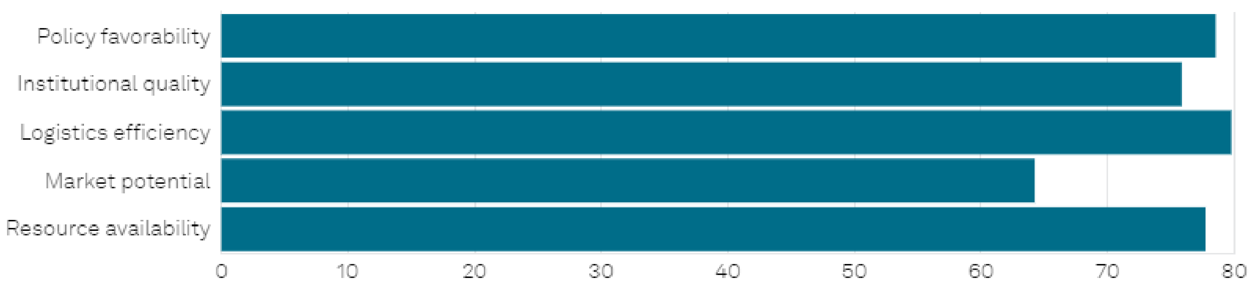
Malaysia's annual GDP growth is expected to exceed 4% through 2035. This will not be enough to position the country among the world's top 30 economies over the next decade, but strong growth momentum will continue, driven by exports, tourism and private consumption.

To ensure Malaysia remains competitive, incumbent Prime Minister Anwar Ibrahim introduced the Madani Economic Framework in 2023. The framework seeks to reinforce domestic policies to attract foreign investment, leverage a promising GDP growth rate and navigate geopolitical uncertainties. The government has also streamlined policies via the New Industrial Master Plan 2030 and National Energy Transition Roadmap. Progress under the Madani Economic Framework is expected as long as political stability continues. While

Malaysia's strategic objectives and policy direction are unlikely to change, a new government may rebrand the framework following general elections in 2027.

Malaysia

Strategic Opportunity Index™ 2024 scores



Data compiled Aug. 5, 2024.
Source: S&P Global Market Intelligence.

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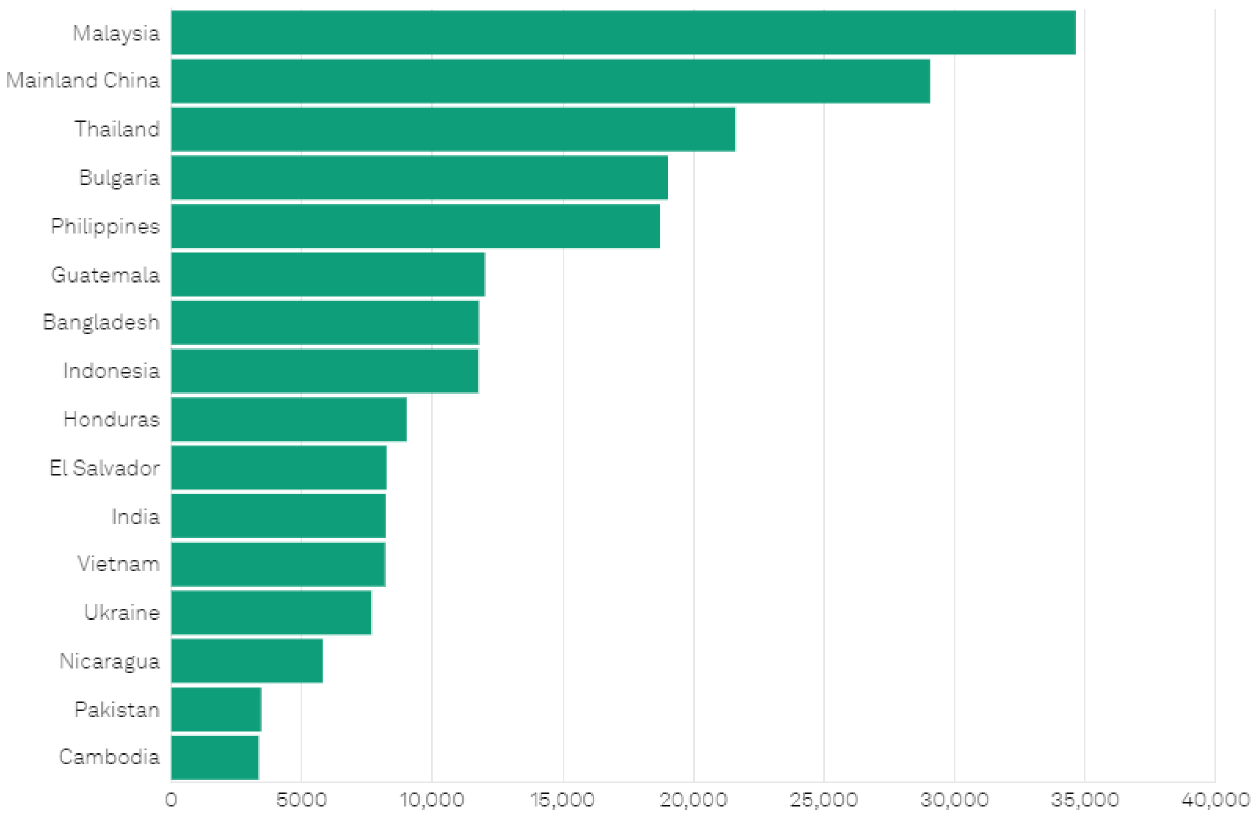
Malaysia is among the few emerging economies in Asia-Pacific seeking to catapult into high income status. With manufacturing's share of GDP sustainably at over 20%, the country remains competitive alongside its peers, including Vietnam, Indonesia and Thailand.

Malaysia is among the few emerging economies in Asia-Pacific seeking to catapult into high income status. With manufacturing's share of GDP sustainably at over 20%, the country remains competitive alongside its peers, including Vietnam, Indonesia, and Thailand. However, a combination of domestic and external factors presents medium-term risks to Malaysia's strategy. Global events in the post-COVID-19 environment have prompted supply chain reorientation from both outside the country and within Malaysia to more cost-competitive locations in Asia-Pacific. To reverse this trend, the Malaysian government has identified the need to upskill labor.

Although labor compensation in Malaysia is higher than in Bangladesh, Cambodia, India, Thailand and Vietnam, the added value per employee in Malaysia is, on average, much higher than in those five countries. This means that Malaysia has a head start while other Asia-Pacific countries are trying to become more integrated, value-add players in the global high-value manufacturing sector.

Malaysia workers add most manufacturing productivity (2023 US$)

Real value added per worker in select emerging markets



Data compiled July 3, 2024.
Source: S&P Global Market Intelligence.

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According to Malaysia's Department of Statistics, in 2023, more than 75% of manufacturing sector workers were "semi-skilled," while only about 18% were "fully skilled." The challenge for the country is to achieve a substantial transition in this split. There are three critical areas to watch to assess how well Malaysia can capitalize on its status as seasoned manufacturing powerhouse by enabling high-skilled labor to support the next frontier of economic development.

- Prime Minister Anwar Ibrahim's administration is likely to establish a more direct link between public and private sector companies, with an approach that accommodates preferences of the private sector. This will likely ensure that Malaysia's approach to bridging the skill gap and upskilling is informed by industry needs and delivered in cooperation.
- Upskilling and reskilling efforts are likely to occur across the value chain of small and medium domestic industries and in education. The government in 2024 has so far publicly earmarked about $45 million for vocational training and upskilling through the

Skill Development Corp., aiming to create a wider pool of high-skilled labor and improve labor mobility.

- The government's foreign policy approach will likely emphasize the strong link between trade and trust, positioning Malaysia in international investment negotiations as capable of working with a range of countries and international companies to engage in manufacturing in sensitive sectors.

The road toward the next decade

The establishment of ambitious long-term growth goals by emerging markets provides a clear roadmap for progress. These goals indicate that policymakers are planning for the future, identifying vulnerabilities and prioritizing strategic areas for growth that require capital mobilization and private investment.

However, setting long-term growth plans and ambitions is only the first step toward achieving emerging markets' growth potential. The experiences of countries such as South Africa, Saudi Arabia and Malaysia illustrate the risks and opportunities that emerging markets may have to navigate to reach their growth objectives. Political willingness to move forward, access to capital, resilient macroeconomic fundamentals, and improvements in regulatory frameworks, infrastructure and skill development will determine how emerging markets can maximize their growth potential over the next decade.

Learn More

- End of the Washington Consensus
- Supply chain politics: National security meets economic growth
- India's Moment
- Examining How Higher And More Efficient Investments Can Boost Emerging Markets' Growth

Which emerging markets will climb the income ladder?

Emerging markets' share of global GDP will continue to grow, but progress in increasing their income levels relative to developed markets will be uneven.

Elijah Oliveros-Rosen, Emerging Markets Chief Economist, S&P Global Ratings, elijah.oliveros@spglobal.com

Thea Fourie, Head of Sub-Saharan Africa Insights and Analysis, S&P Global Market Intelligence, thea.fourie@spglobal.com

Highlights

Although the combined GDP of the 10 largest emerging markets is approaching that of the 10 largest developed markets, income per capita in the former is still projected to be about a third of that in the latter by 2030.

Productivity growth will determine which emerging markets progress in income per capita convergence. Economies benefiting from new global structural trends such as energy transition and supply chain reorientation, as well as from productivity-enhancing reforms, will be better positioned to climb the income ladder.

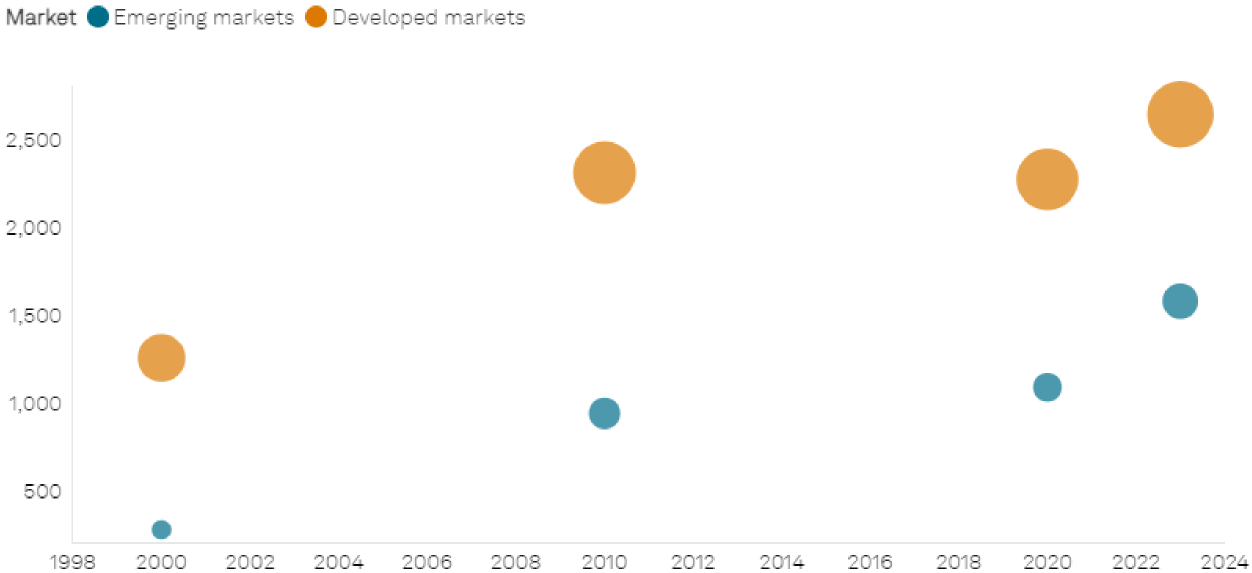
Economies that fall behind on income convergence risk increased social and political instability as their populations grapple with unmet economic development expectations. Several emerging markets and frontier markets, especially in sub-Saharan Africa, where productivity growth rates are particularly low, are at risk of falling behind.

Emerging markets will play a larger role in the global economy in the coming years, driven by more favorable demographic and productivity dynamics than in developed markets. The combined share of global GDP of the 10 largest emerging markets[3] has more than doubled from 13% in 2000 to 31% in 2023 and is likely to continue growing. However, even as these economies surpass developed markets in size, their GDP per capita levels are likely to remain low — at around a third of those in developed markets. While GDP per capita convergence is not the only determinant of reaching developed market status, failing to improve this metric increases the risk of social and political instability due to unmet economic expectations. Increased productivity rates will be key to unlocking faster GDP per capita convergence for emerging markets.

[3] The 10 largest emerging markets by nominal GDP as of 2023 are China, India, Brazil, Russia, Mexico, Indonesia, Türkiye, Saudi Arabia, Poland and Argentina. The 10 largest developed markets are the US, Germany, Japan, the UK, France, Italy, Canada, Australia, South Korea and Spain.

Combined share of GDP of 10 largest emerging markets has more than doubled since 2000 (US$B)

Median GDP and GDP per capita in the 10 largest emerging and developed markets
Bubble size = GDP per capita



Data compiled Aug. 31, 2024.
The largest 10 emerging markets by nominal GDP as of 2023 are mainland China, India, Brazil, Russia, Mexico, Indonesia, Türkiye, Saudi Arabia, Poland and Argentina. The largest 10 developed markets are the US, Germany, Japan, the UK, France, Italy, Canada, Australia, South Korea and Spain.
Sources: World Bank; S&P Global Ratings.

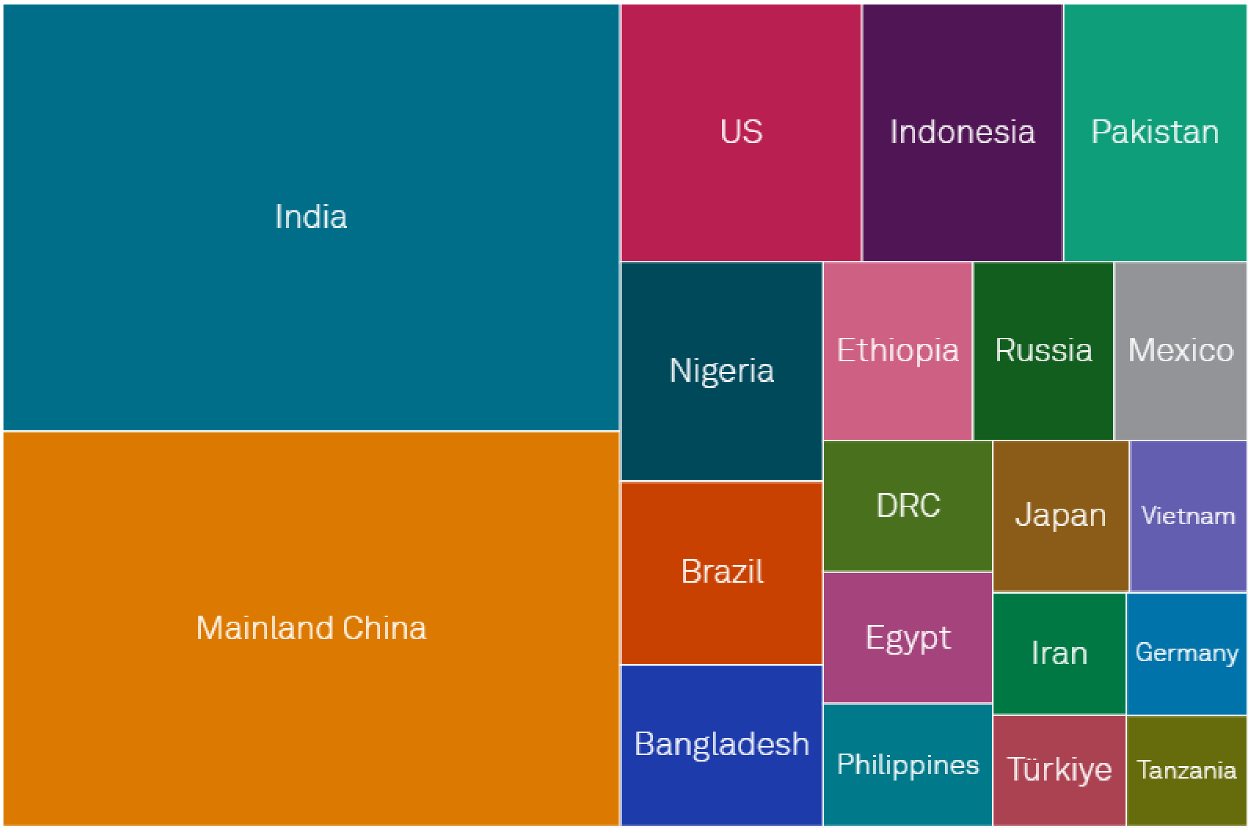
https://public.flourish.studio/visualisation/19477610/

By 2030, the largest emerging markets' share of global GDP could rival that of developed markets, but income will not follow suit

GDP growth in emerging markets is likely to continue outpacing developed markets in the coming years, partly due to higher population growth. By 2030, the combined population of the 10 largest emerging markets by GDP is projected to be nearly 3% larger than in 2023, accounting for nearly half of the global population. In contrast, over that same horizon, the population in the 10 largest developed markets is projected to grow 1%, with population size shrinking in several markets, including Japan and a few in Europe.

More than one-third of people live in India or China

Projected share of world population in 2030 in top 20 most populous countries



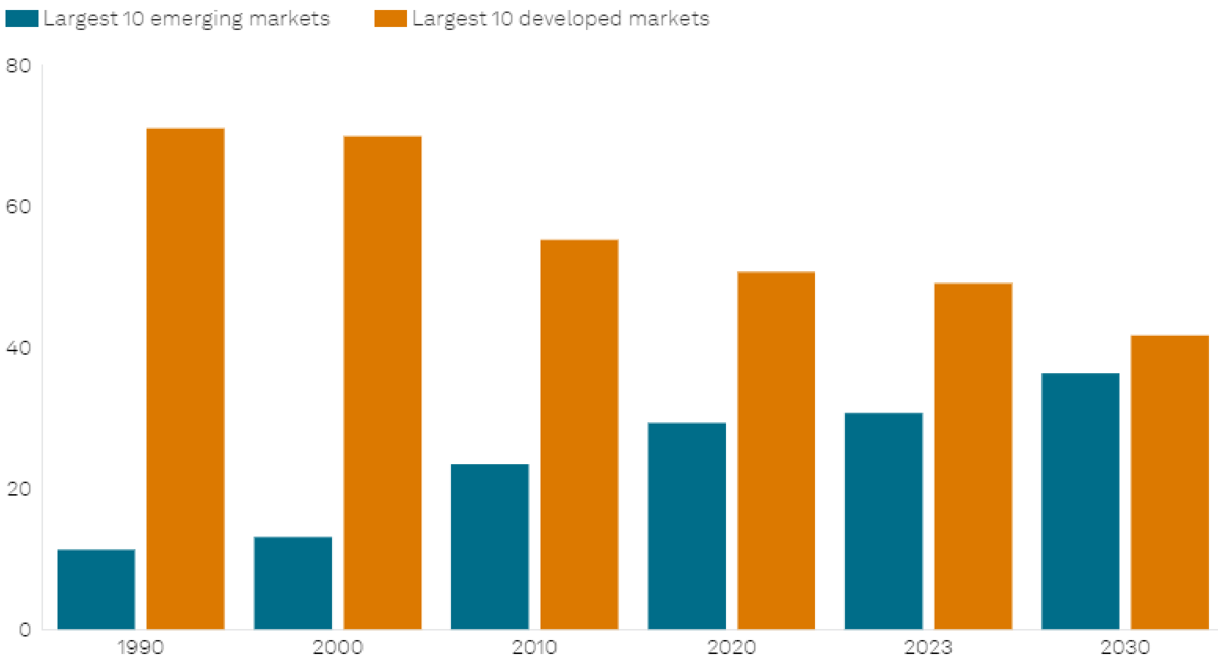
Data compiled Aug. 31, 2024.
DRC = Democratic Republic of the Congo.
Sources: United Nations; S&P Global Ratings.

https://public.flourish.studio/visualisation/19477926/

Assuming population projections hold and labor force participation and productivity rates remain similar to the past decade's average, the combined GDP of the 10 largest emerging markets will approach that of the 10 largest developed markets.

Emerging markets' GDP catching up to developed markets (%)

Share of world GDP based on current US dollars



Data compiled Aug. 31, 2024.
2030 is not our forecast. It is a scenario that assumes productivity and labor force participation will average the same as it has in the past decade, taking into account UN population projections and stable real exchange rates.
Sources: International Labour Organization; United Nations; World Bank; S&P Global Ratings.

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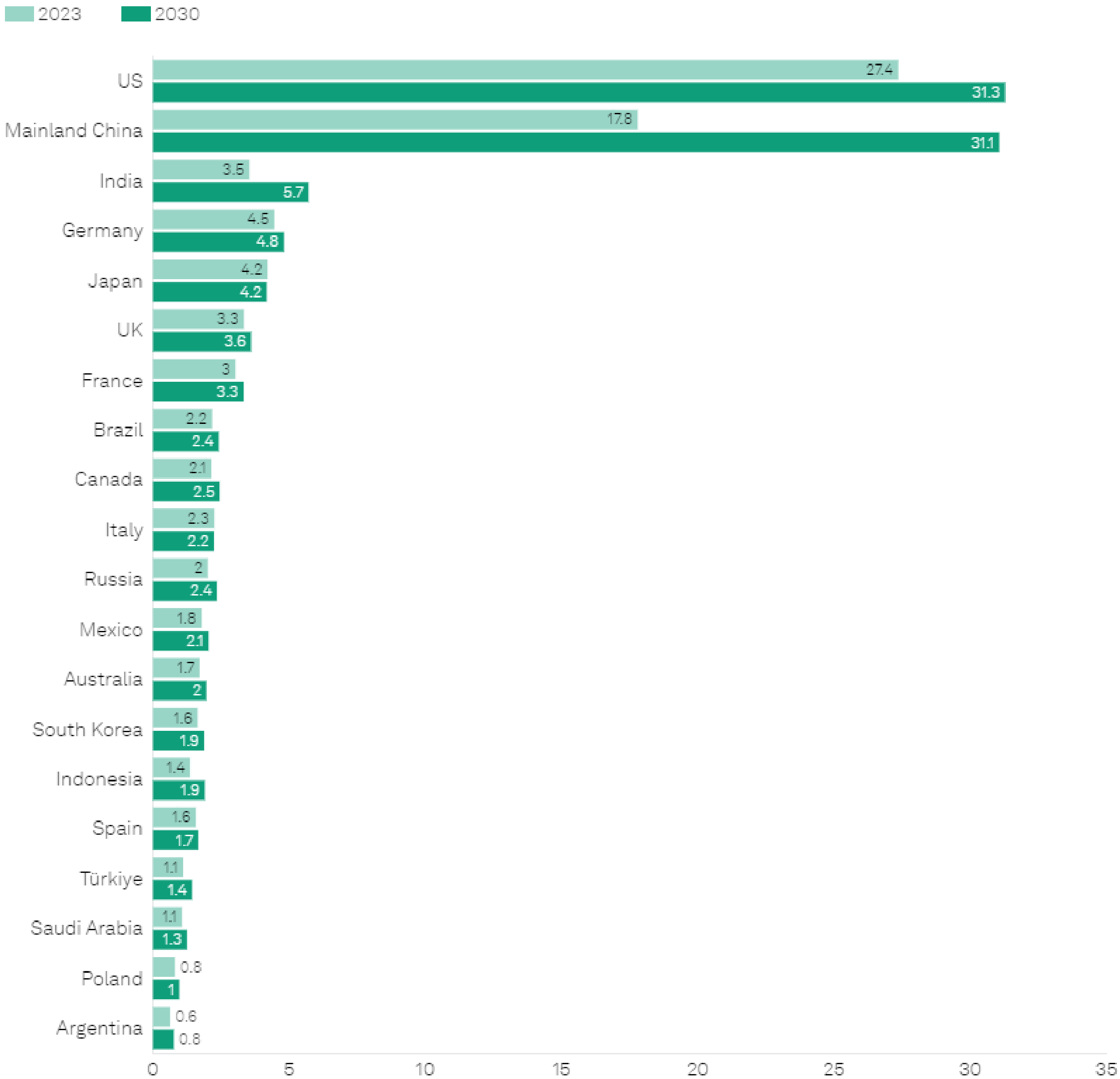
Mainland China's GDP may rival US' by 2030 (US$ trillion)

GDP of largest 10 emerging, developed markets



Data compiled Aug. 31, 2024.
2030 is not our forecast. It is a scenario that assumes productivity and labor force participation will average the same as it has in the past decade, taking into account UN population projections and stable real exchange rates.
Sources: International Labour Organization; United Nations; World Bank; S&P Global Ratings.

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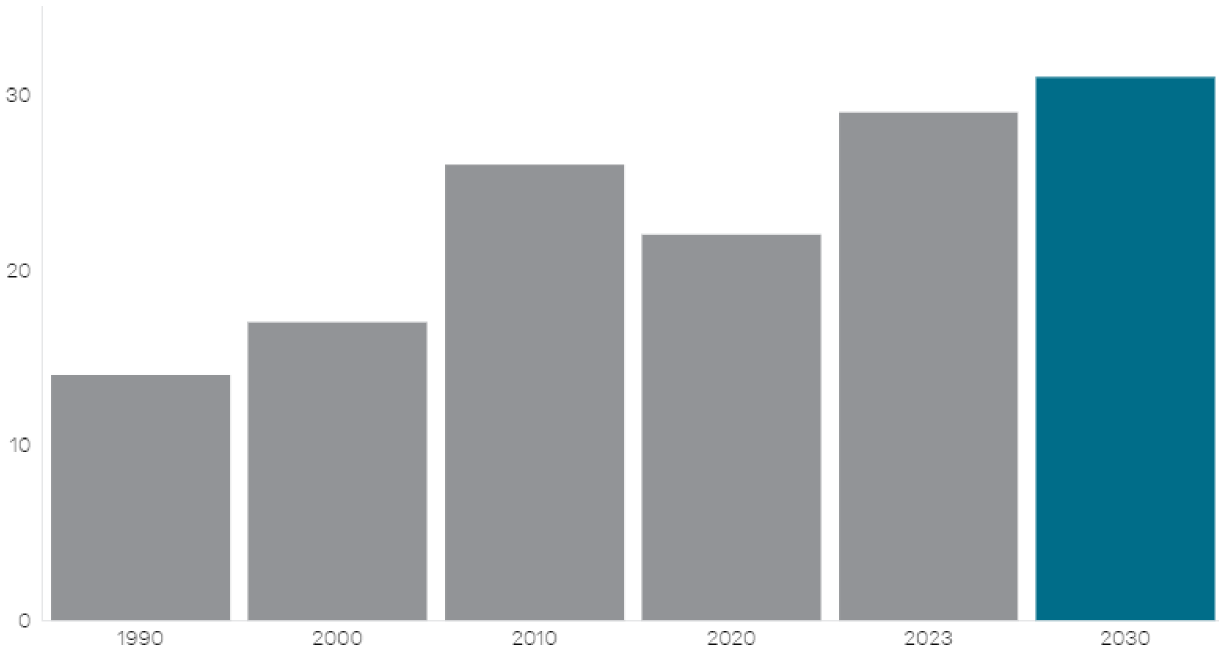
However, under the same assumptions, GDP per capita in emerging markets will remain less than a third of that in developed markets by 2030, relatively unchanged from today. Even after adjusting for purchasing power parity to reflect cost of living differences, this number would be just over half of developed markets' GDP per capita by 2030, compared with just under half currently. Therefore, to accelerate income per capita convergence[4], productivity growth must improve.

GDP per capita ratio to top 30% by 2030 (%)

Median of 10 largest emerging, developed markets using current US dollars



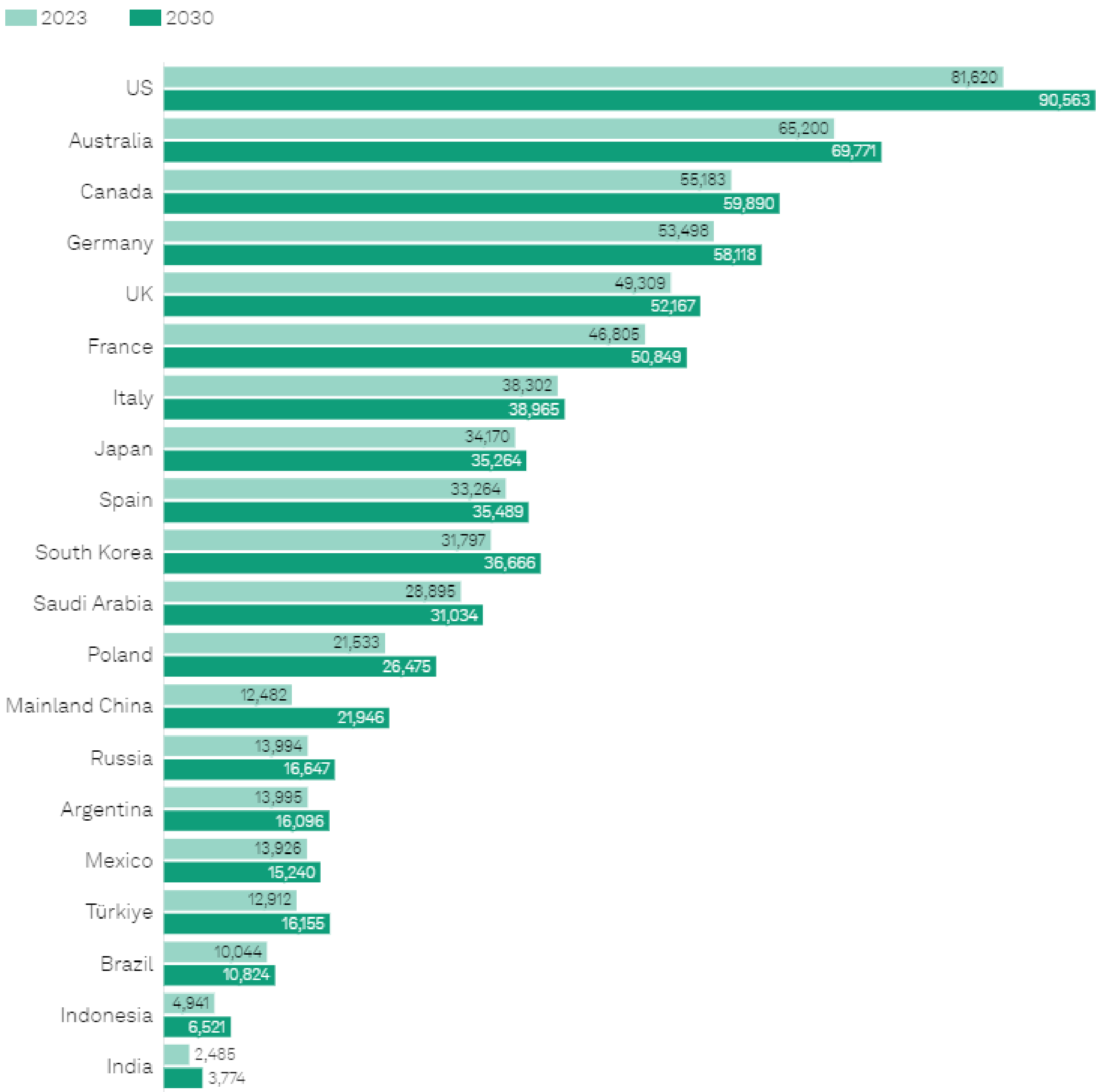
Data compiled Aug. 31, 2024.
2030 is not our forecast. It is a scenario that assumes productivity and labor force participation will average the same as it has in the past decade, taking into account UN population projections and stable real exchange rates.
Sources: International Labour Organization; United Nations; World Bank; S&P Global Ratings.

https://public.flourish.studio/visualisation/19476890/

[4] In this article, income per capita follows the same definition as GDP per capita. Data on household income per capita is not widely available across emerging markets.

Developed markets retain higher GDP per capita through 2030 (US$)

GDP per capita in 10 largest emerging, developed markets



Data compiled Aug. 31, 2024.
2030 is not our forecast. It is a scenario that assumes productivity and labor force participation will average the same as it has in the past decade, taking into account UN population projections and stable real exchange rates.
Sources: International Labour Organization; United Nations; World Bank; S&P Global Ratings.

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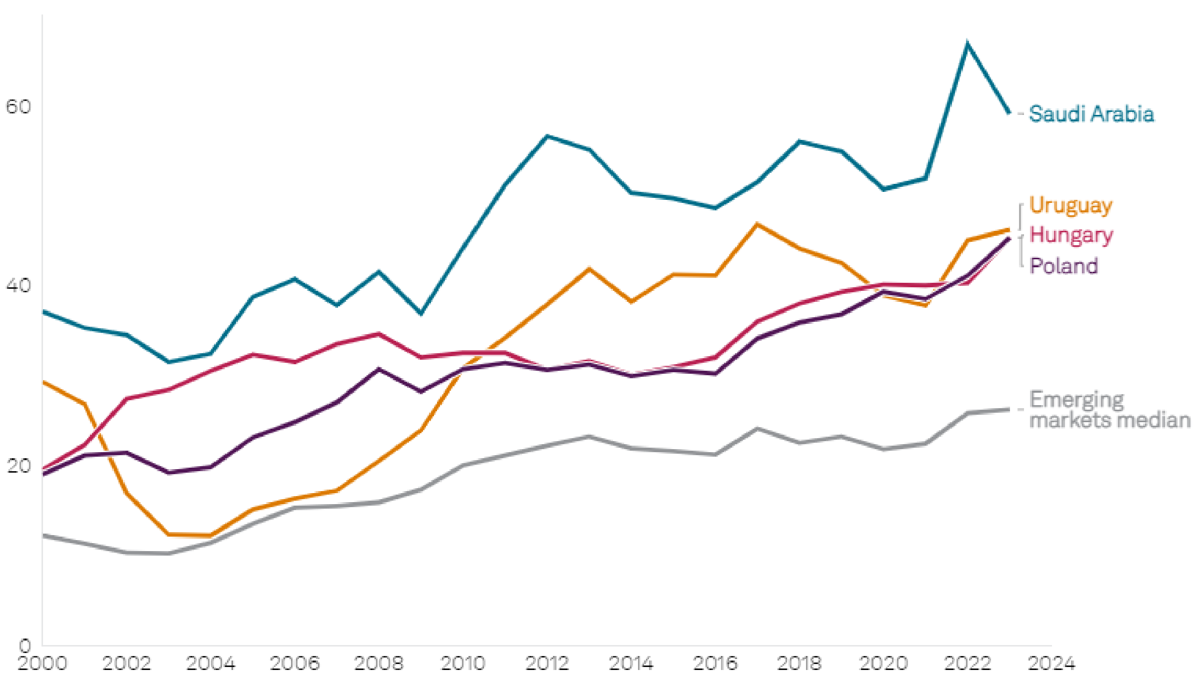
Where is GDP per capita convergence progressing the most?

In a larger sample of emerging markets[5], several have significantly progressed toward the income per capita levels of developed markets. GDP per capita in Saudi Arabia, Uruguay, Hungary and Poland exceeds 45% of that of G7 countries[6], with all exceeding 55% after adjusting for purchasing power parity, reaching upper-middle-income status. Those upper-middle-income emerging markets have directly benefited from a combination of economic structural changes over the past two decades (greater global trade, uptick in commodity prices) and domestic reforms (trade and capital liberalization).

GDP per capita of Saudi Arabia, Uruguay, Hungary, Poland above 45% of G7 countries (%)

GDP per capita ratio to G7 in current prices



Data compiled Aug. 31, 2024.
Sources: World Bank; S&P Global Ratings.

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[5] In this larger emerging market sample, we include the 10 largest markets — China, India, Brazil, Russia, Mexico, Indonesia, Türkiye, Saudi Arabia, Poland and Argentina — as well as Bulgaria, Chile, Colombia, Costa Rica, Egypt, Hungary, Malaysia, Nigeria, Panama, Peru, Philippines, Romania, South Africa, Thailand, Uruguay and Vietnam.
[6] Group of 7 (G7) countries include Canada, France, Germany, Italy, Japan, the UK and the US.

Despite the progress these emerging markets have made to climb the income ladder, the road to transitioning to developed market status is still long and not assured.

The benchmark example of an emerging market transitioning to developed market status is South Korea in the late 1990s. South Korea benefited from favorable external conditions, such as global trade liberalization, and an ambitious and successful reform agenda, including economic and financial reforms. This included improving the country's institutional framework and deepening its capital markets.

To continue progressing in income per capita convergence, especially as population growth outpaces that in developed markets, upper-middle-income emerging markets will likely require a mix of favorable external conditions and productivity-boosting domestic reform. The challenge is that the global structural trends from which these upper-middle-income emerging markets have benefited are shifting — global trade is being undermined by protectionism and industrial policy, and most commodity prices are much lower than in the past.

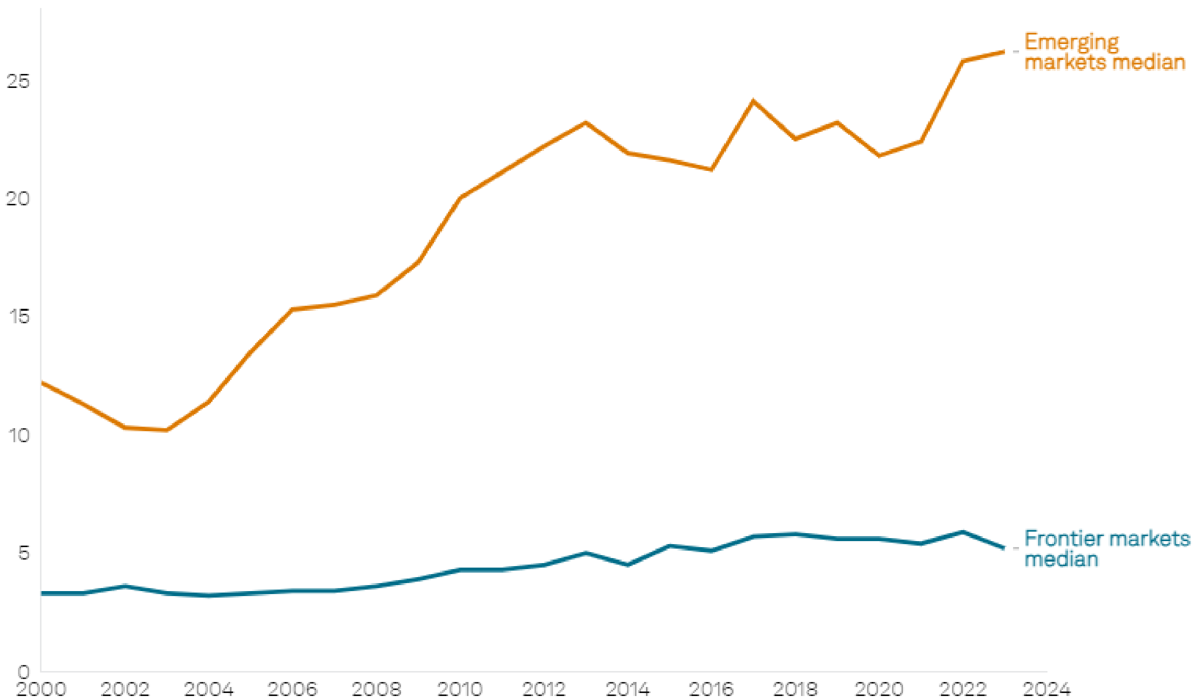
What about frontier economies?

In frontier markets[7], which are economies that typically have lower income levels and less developed capital markets than emerging markets, GDP per capita convergence with developed economies has been slower. The pace of frontier markets' GDP per capita convergence with developed markets has been trending lower since 2018, except during the post-COVID-19 catch-up period in 2022.

[7] The frontier markets sample used in this article includes Algeria, Angola, Bangladesh, Benin, Bolivia, Burundi, Cambodia, Cameroon, Côte d'Ivoire, Dominican Republic, Ecuador, El Salvador, Ethiopia, Ghana, Guatemala, Honduras, Jamaica, Kazakhstan, Kenya, Laos, Libya, Morocco, Mozambique, Namibia, Nicaragua, Pakistan, Paraguay, Republic of Congo, Senegal, Sri Lanka, Sudan, Tanzania, Trinidad and Tobago, Tunisia, Uganda, Zambia and Zimbabwe.

Frontier markets trending lower over past couple of years (%)

GDP per capita ratio to G7 in current prices



Data compiled Aug. 31, 2024.
Sources: World Bank; S&P Global Ratings.

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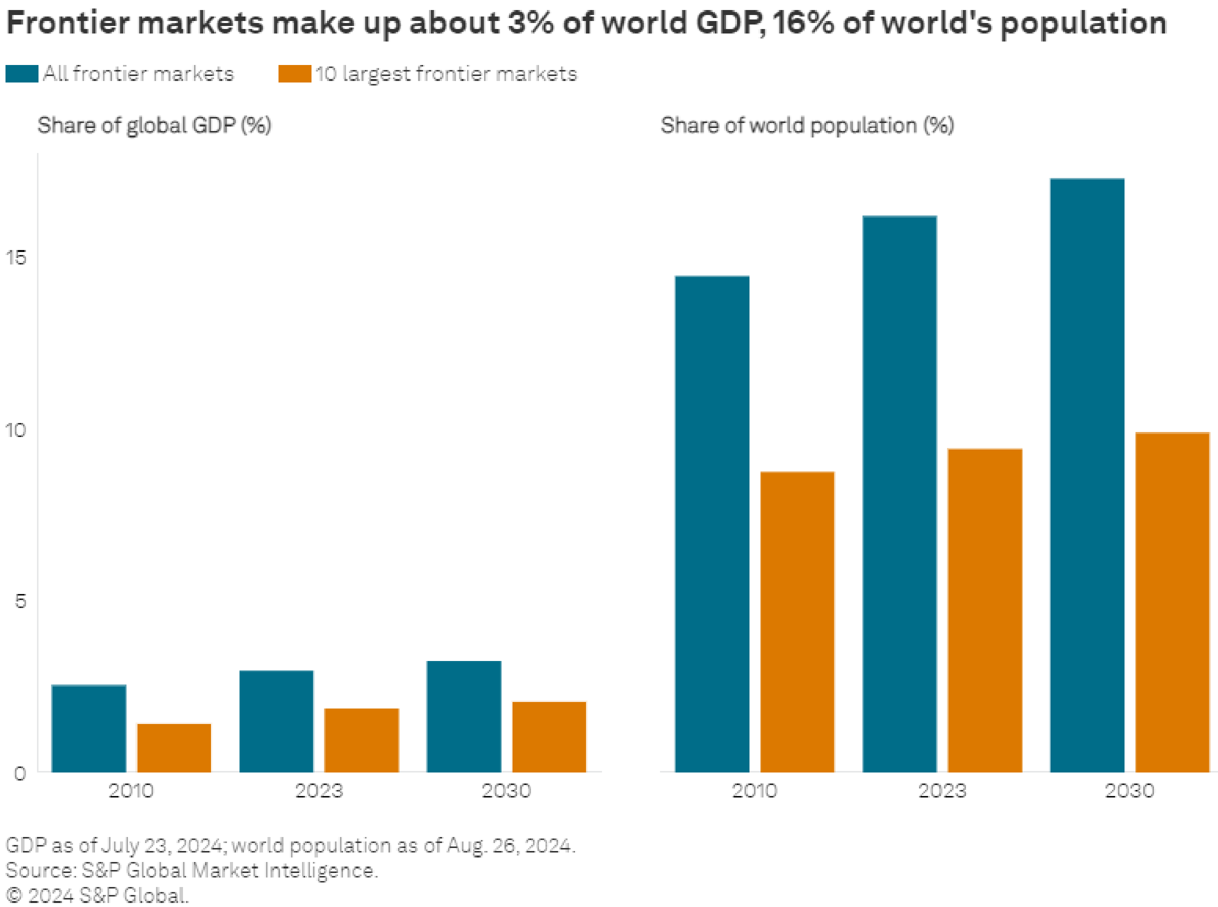
Frontier markets' economic performance remains vulnerable to adverse climate events, the volatility of a single commodity or service as the primary source of external liquidity, and rising public sector debt levels. In 2022–23, frontier markets with excessively high debt had limited access to global credit markets, contributing to a funding squeeze. Weaker currencies against the US dollar further increased external debt servicing costs, forcing countries such as Chad, Ghana, Zambia and Ethiopia to seek debt restructures under the G20 common framework. The funding squeeze coincided with a pivot in China's Belt and Road Initiative, with reduced funding and a greater focus on specific investment projects related to critical minerals, green energy transformation and digitalization.



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Structural changes, including low production costs and a relatively predictable business environment for foreign firms operating in Cambodia, as well as economic diversification in Côte d'Ivoire and Uganda, are expected to boost GDP per capita growth in these frontier market economies through 2030. Some frontier markets, such as Kazakhstan, will continue to benefit from the rerouting of trade to avoid sanctions on Russia in response to the Russia-Ukraine war.

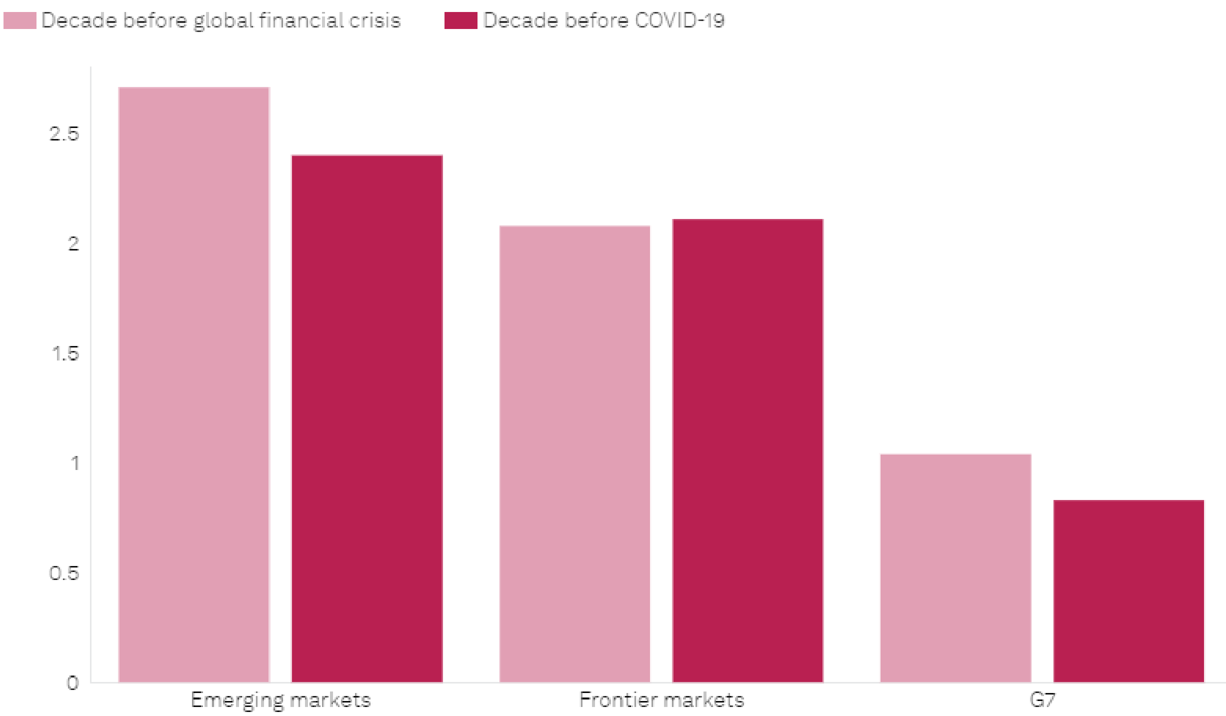
Greater productivity growth: The key to unlocking convergence

To continue climbing the ladder, emerging markets, particularly those with high population growth, must sustain higher productivity rates than in developed markets. In frontier markets, especially in sub-Saharan Africa, where population growth is projected to be among the highest globally, failing to improve productivity could result in income per capita divergence (a widening of income level gaps with developed markets).

The challenge is that productivity rates in most emerging markets have been falling over the past decade, faster than in developed markets. Emerging markets will need to reverse these rates to improve their income per capita convergence progress.

Frontier markets' productivity rates improving (%)

Median real output per worker



Data compiled Aug. 31, 2024.
Sources: International Labour Organization; S&P Global Ratings.

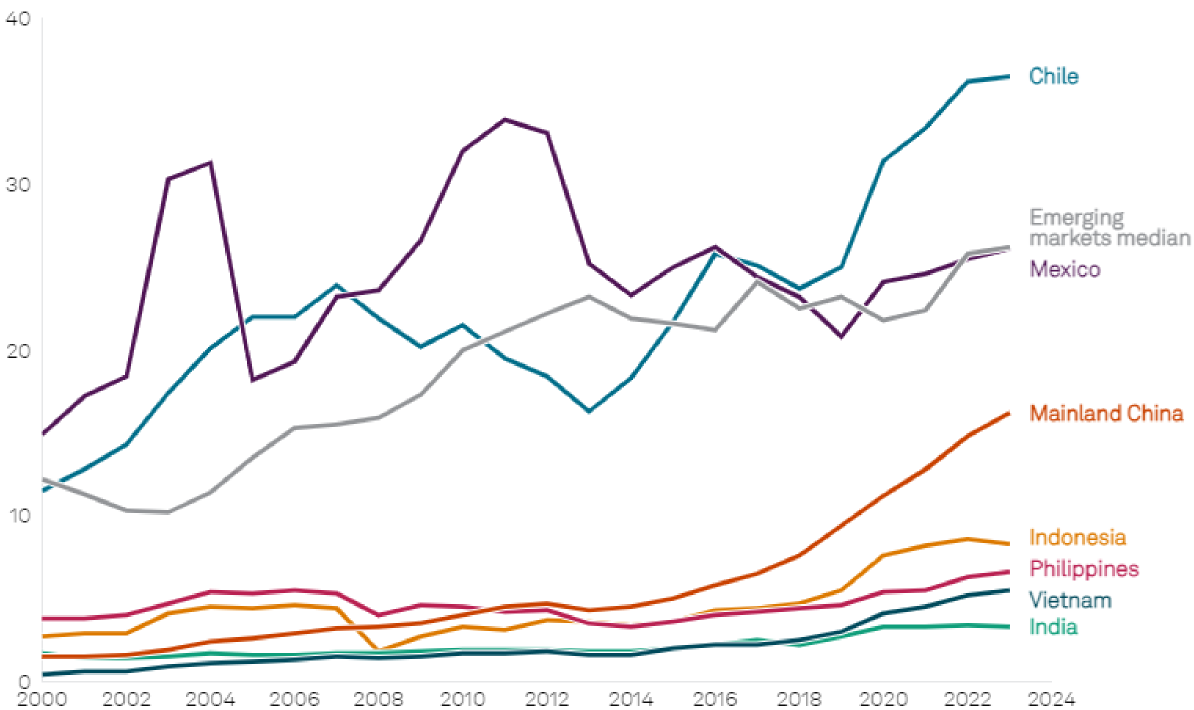
https://public.flourish.studio/visualisation/19490893/

Emerging markets that benefit from global structural trends such as energy transition and supply chain reconfigurations are better positioned to boost productivity. Indonesia, Chile and the Philippines, among others, are well suited to supply metals and minerals required for the energy transition. Mexico, India and Vietnam are among the emerging markets that could benefit from supply chain relocation given their relatively mature manufacturing sectors and strategic trade ties with the US and other developed markets.

However, appropriate institutional frameworks and necessary infrastructure will determine which emerging markets can bring these potential benefits to fruition. These include a regulatory backdrop that incentivizes investment and sufficient availability of resources such as competitively priced energy. Furthermore, emerging markets will face the rising mechanization of manufacturing production in developed markets, accelerated by AI, as well as trade protectionism in key sectors such as semiconductors and electric vehicle production (see "Competing with the future: Creating supply chain competitive advantage" to learn more).

Global production trends could aid some emerging markets (%)

GDP per capita ratio to G7 in current prices of select emerging markets



Data compiled Aug. 31, 2024.
Sources: World Bank; S&P Global Ratings.

https://public.flourish.studio/visualisation/19491108/

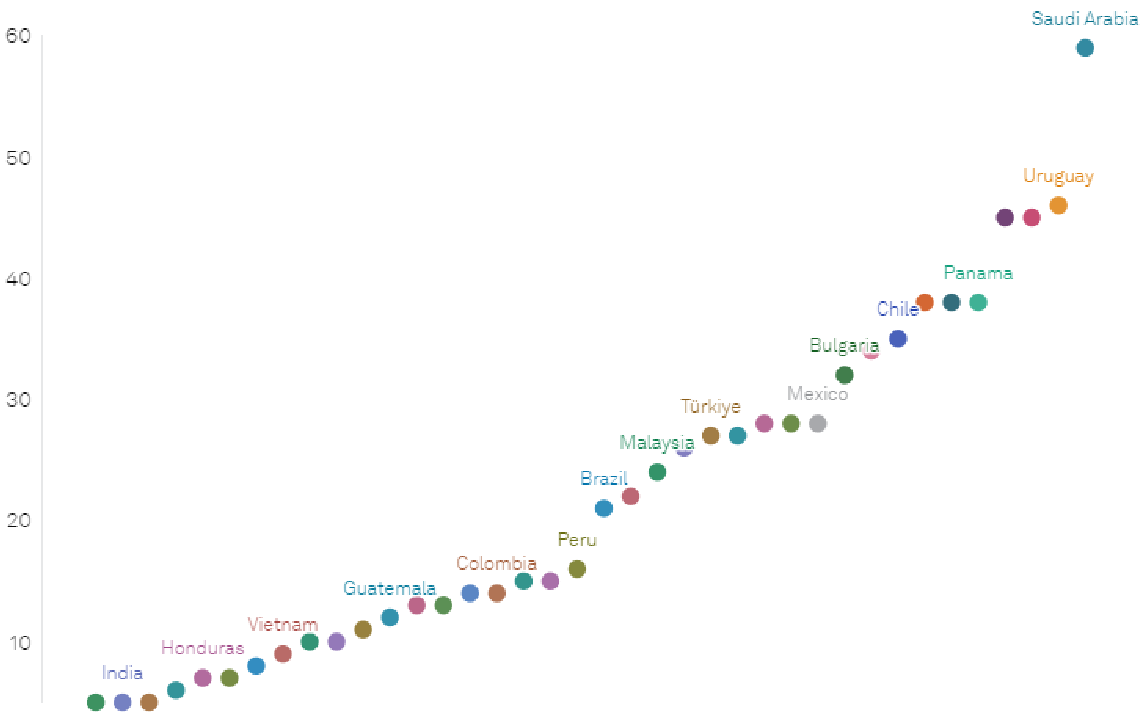
In emerging markets not directly exposed to those structural trends, domestic reforms will play a larger role in boosting productivity. These include measures to reduce corruption and insecurity, improve the institutional framework for investors, lessen regulatory burdens on the private sector and incentivize improvements in human capital.

Income convergence will be key for social stability and policy predictability

The role of emerging markets in the global economy will continue to increase in the coming years as their share of global GDP rises. However, ensuring that economic expectations are met among their populations will facilitate the social stability and policy predictability that underpin emerging markets' attractiveness as investment destinations. This will be key as emerging markets face developing global challenges, such as geopolitical fragmentation, climate change and supply chain reconfiguration, that will often require more investment.

Role of emerging markets will increase (%)

GDP per capita ratio to G7 in 2023 using current prices



Data compiled Aug. 31, 2024.
Source: World Bank; S&P Global Ratings.

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Competing with the future: Creating supply chain competitive advantage

Emerging markets must compete with cheap labor from frontier economies and increased mechanization in developed economies to maintain economic growth from supply chain integration.

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Highlights

Emerging markets such as Vietnam and India are following China's lead in leveraging lower labor costs and innovative support mechanisms to build their positions in global supply chains, but the sustainability of this strategy over the next decade remains uncertain.

Emerging economies must address rising labor costs and invest in workforce upskilling to maintain their competitive advantage against cheaper frontier markets.

Competition between emerging markets with similar resource endowments and labor costs requires companies to mitigate labor strike and regulatory risks while governments attract more global investment and create national champions, all while complying with global trade rules.

To compete with developed economies' government support for local manufacturing and the use of rules of origin to secure their economic interests, emerging markets such as Malaysia, Indonesia and India have successfully attracted investment and boosted exports by leveraging their unique value propositions.

Mechanization is the biggest threat to emerging markets in the coming decade, with robotics and additive manufacturing being boosted by machine vision and other AI tools. Emerging markets must invest in skills and mechanized manufacturing to ensure continued supply chain-led growth.

For emerging markets to sustain manufacturing-led growth, they must move beyond cheap labor, leverage unique resource endowments and invest in skills and manufacturing automation.

The supply chain development pipeline

Emerging markets face competition on multiple fronts as they look to build and maintain their positions in global supply chains over the next decade, retain manufacturing sector employment and achieve national security through access to materials and products.

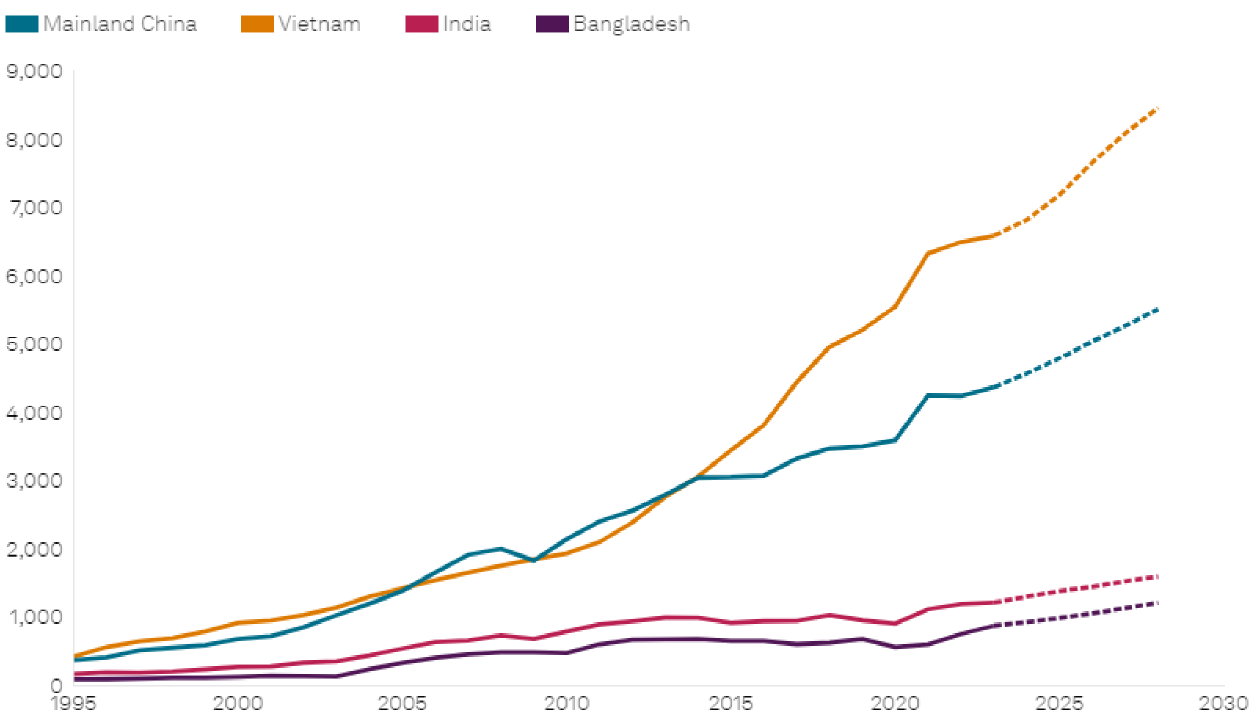
Historically, this process has involved leveraging basic materials and labor in low-value-added assembly manufacturing for export, a strategy central to China's economic development since 2004.

Most recently, Vietnam has emulated China's strategy as firms seek cheaper labor and lower risk from the trade protectionism of customer markets such as the US. Vietnam's exports of goods and services per employee surpassed China's as early as 2014; this metric grew 5.8% annually in the five years to 2023 and is expected to grow 5.1% annually in the next five years. India is on a similar path, leveraging its domestic market and innovative support mechanisms for manufacturing in higher-tech industries.

This "supply chain development pipeline" may not be sustainable for emerging markets that have already benefited from it, nor is it guaranteed that countries with lower-value-added manufacturing can participate. The risk comes from economics — the more countries that attempt this strategy, the more competition there will be for the same end markets, and the worse the strategy will perform.

Vietnam generates export-led growth (US$, adjusted for inflation)

Exports of goods and services per employee



Data compiled Aug 28, 2024.
Source: S&P Global Market Intelligence.

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Competing with frontier economies: Upskill to stay ahead of low-labor-cost competitors

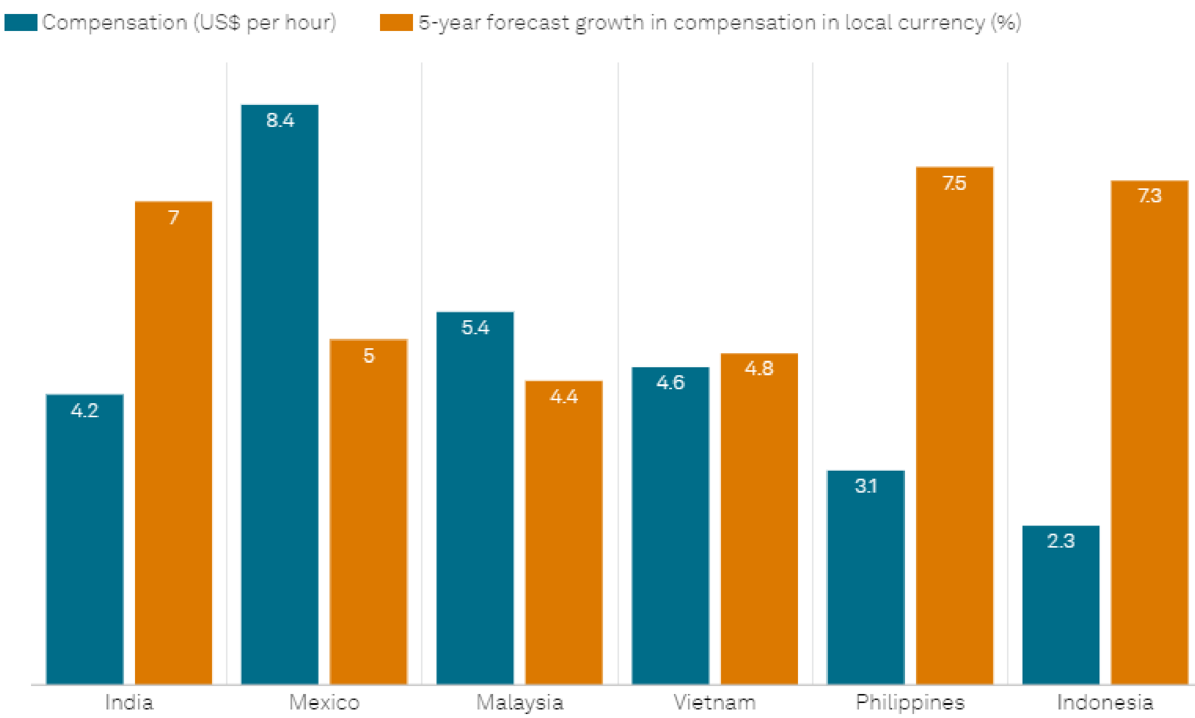
If part of the attraction of reshoring to new markets is access to lower-cost labor, then emerging markets have an eroding competitive advantage over the coming decade versus frontier markets, particularly if local labor cost inflation accelerates.

S&P Global Market Intelligence estimates show that India's manufacturing compensation cost of $4.2 per hour in 2024 is half that of Mexico's and 78% of Malaysia's, both of which are competitors for reshoring of electronics manufacturing. Yet, India's cost is 34% higher than the Philippines' and 81% above Indonesia's, which may threaten India's more mature manufacturing businesses.

Therefore, the key to success is for governments to establish policies to upskill workforces both generationally (e.g., schooling) and in the short term (e.g., incentives for workplace education) and to reduce the "brain-drain" effects of high-skill worker emigration.

Indian labor costs higher than in Philippines, Indonesia; inflation similar

Manufacturing compensation costs



Data compiled Aug. 28, 2024.
Source: S&P Global Market Intelligence.

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Competing with other emerging markets: Making business safe and easy

Assuming equal labor costs, competition with other emerging markets is a function of attracting investment from global multinationals and creating state-supported domestic firms, or “national champions,” without falling foul of global rules on industrial subsidies.

The key is to enhance the domestic market's attractiveness to augment export production and the ease of doing business. From a supply chain perspective, scoring countries’ comparative risks from disruptions (e.g., labor strikes or infrastructure) and regulatory risks (e.g., administrative burden, enforcement of contracts or expropriation risks) falls within the purview of government policy.

S&P Global Market Intelligence risk scores show that countries in the Association of Southeast Asian Nations (ASEAN) have a similar low chance of labor strikes, while the risk scores for Mexico and India are somewhat higher. For Mexico, the risk of labor strikes is partly linked to the implementation of labor rules under the US-Mexico-Canada Agreement, illustrating the double-edged sword of membership to a regional free trade agreement (FTA).

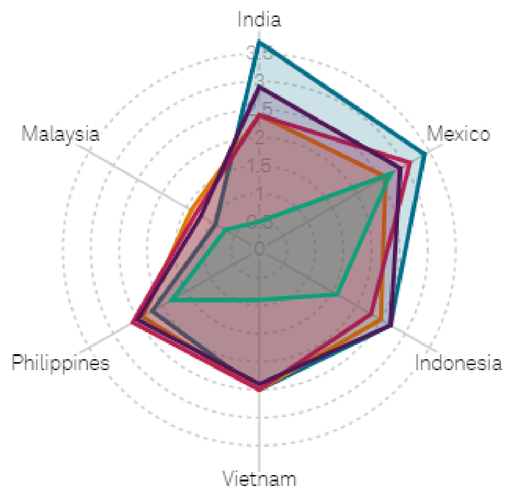
However, such memberships can provide a competitive advantage by making an emerging market a manufacturing base for sales across the FTA, which can be particularly advantageous for countries with lower labor costs. For India and China, a large domestic market can obviate the need for regional FTA membership.

Trade-off between risk types necessary for most reshoring locations

Country risk score (0-10, log scale) as of June 13, 2024
Click to see individual risk types

All | Labor strikes | Infrastructure disruption | Regulatory burden | Contract enforcement | Expropriation

Labor strikes · Infrastructure disruption · Regulatory burden · Contract enforcement · Expropriation



Data compiled June 13, 2024.
Source: S&P Global Market Intelligence.

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Competing with developed markets: Matching incentives, leveraging materials

Everyone wants manufacturing jobs, including developed economies, which have recognized a generational shift in some sectors (e.g., the electrification of vehicles) and national security incentives in others (e.g., semiconductors) to rebuild their manufacturing base.

This desire has led the EU, US, Japan and South Korea, among others, to provide direct investment in manufacturing and persistently use rules of origin within such schemes. The efficacy of these policies can be seen in the high levels of private investment in those countries, although their economic success has yet to be proven. Success for emerging markets could involve adopting subtly different government-led policies than those of Malaysia, Indonesia and India.

Malaysia — Openness and low operational risk

Malaysia is well established as an export manufacturing center, drawing reshoring investments from chip manufacturers, including Intel Corp. and Texas Instruments Inc. in the

Penang area in the 1970s. Its initial advantages have continued, with exports of computer chips growing 12% annually since 2015.

Low operational risks, a willingness to sign free trade deals and a light touch on regulations (rather than mass intervention) have been key to Malaysia's success. The country has 16 FTAs, including seven bilateral agreements, such as with Japan and India, and membership in the free trade groups ASEAN (which also provides FTAs with China and South Korea), Regional Comprehensive Economic Partnership (RCEP) and Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). As a result, 62% of Malaysia's trade is with FTA partners, with a further 8% covered by the EU and 13% by the US.

Developed economy chip manufacturing support has largely focused on the latest technologies rather than the "mature node" systems in which Malaysia specializes. An emergent challenge, however, may come from a push by the Chinese government to support production of mature node systems, potentially squeezing Malaysia's market share.

Indonesia — Long-term gain from short-term pain

Indonesia has successfully broken out of the commodity trap that has led many emerging markets to prioritize short-term export earnings over using natural resource control to ensure the development of higher-value-added products. The need for nickel in electric vehicle batteries and the production of stainless steel provided fortunate timing.

The Indonesian government banned the export of nickel ore in 2014 and again from 2020 onward to encourage investment in local refining and, in due course, downstream manufacturing. The country expanded the ban in 2023 to include other materials. Subsequent investments by metals processors, particularly those in China, resulted in 28% annual growth in the country's exports of nickel-related products between 2015 and 2024.

The investment in Indonesian capacity by Chinese firms raises a challenge for Indonesian exporters as the ownership stakes may make Indonesian products ineligible for US Inflation Reduction Act subsidies; the US is also developing its own nickel resources, which presents a long-run challenge. Indonesia's next step may be to move further downstream into battery and even vehicle manufacturing, although the inclusion of Chinese stakeholders in those projects would again preclude Inflation Reduction Act eligibility.

India — Dialing up a combination of trade and manufacturing incentives in a large market

India's expansion in electronics has thus far followed an assembly-to-component strategy, using tariffs and production-linked incentives to draw investment in the manufacturing of smartphones and other network-connected devices. The sheer scale of sales opportunity in the Indian market has also provided "in-market, for-market" justifications for investments in manufacturing in the country.

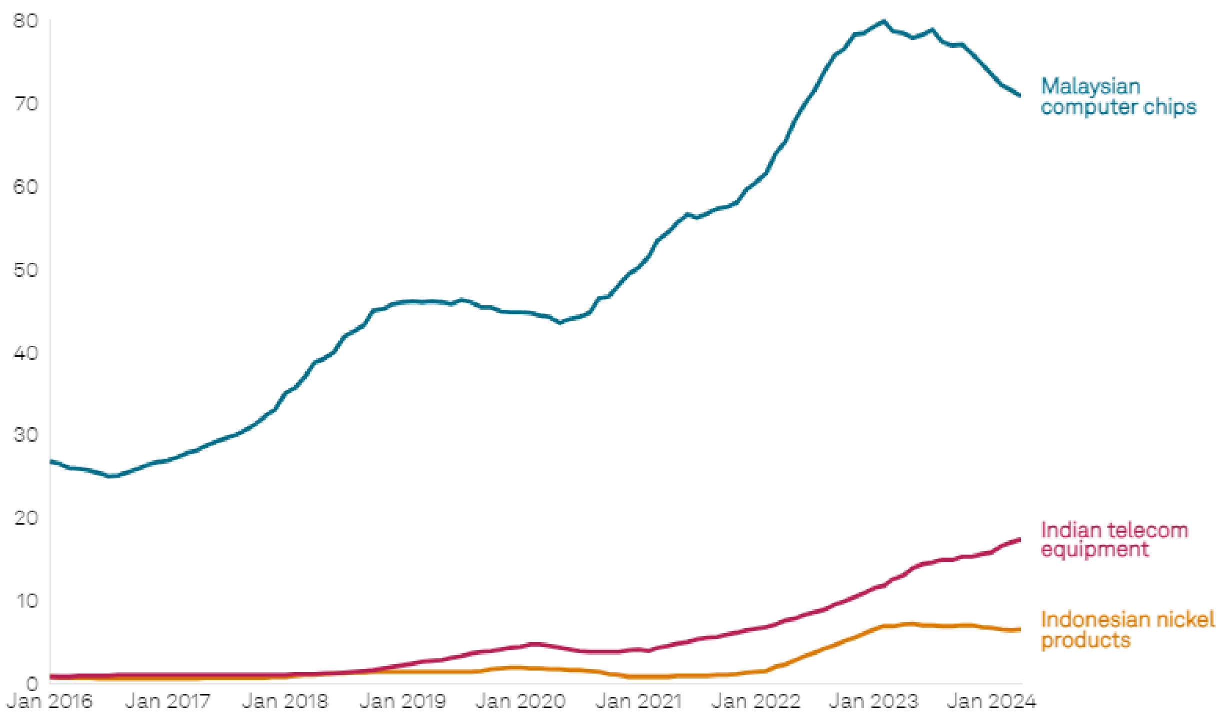
India's consumer spending on goods is worth $1.29 trillion in 2024, S&P Global Market Intelligence forecasts show, with the inflation-adjusted growth of 4.8% in the past five years expected to increase to 7.0% in the next five years. The acceleration in growth is particularly marked in export industries such as apparel (9.5% in the next five years), household equipment including appliances and electronics (8.8% in the next five years) and transport equipment (8.5% in the next five years).

Aside from manufacturing for local sales, the contracted electronics manufacturers also export products, particularly smartphones, driving 44% annual growth in telecom equipment exports from 2015 to 2024.

The challenge for India's strategy of working upstream from assembly is that many developed economies and China are actively looking to build up their electronic components sectors. Heavy-handed application of trade management conditions, as India tried but abandoned for laptop computers in 2023, can dampen global investment. Instead, widening the range of assembled products that benefit from production-linked incentives should drive economies of scope that make upstream supply chain investments more compelling.

Global manufacturing exports not without volatility and risks (US$B)

Global exports, 12-month trailing total



Data compiled Aug. 28, 2024.
Source: S&P Global Market Intelligence.

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Competing with the future: Building technology infrastructure and skills

If labor is the bedrock of emerging markets' economic development through supply chain integration, then the biggest obstacle for these markets may not be cheaper frontier markets, more accommodating emerging markets or big-spending developed economies; rather, it may be a declining requirement for labor. The requirement for labor in the manufacturing sector — particularly assembly — is falling in the 10-year view as the latest manufacturing hardware technologies evolve to include more advanced additive manufacturing and as robotics are augmented by rapid software developments in machine vision and other AI systems.

This decline is a particularly appealing situation for developed economies, where other motivations for manufacturers considering reshoring, including being close to market and mitigating political and geopolitical risk, are sometimes disregarded due to expensive labor.

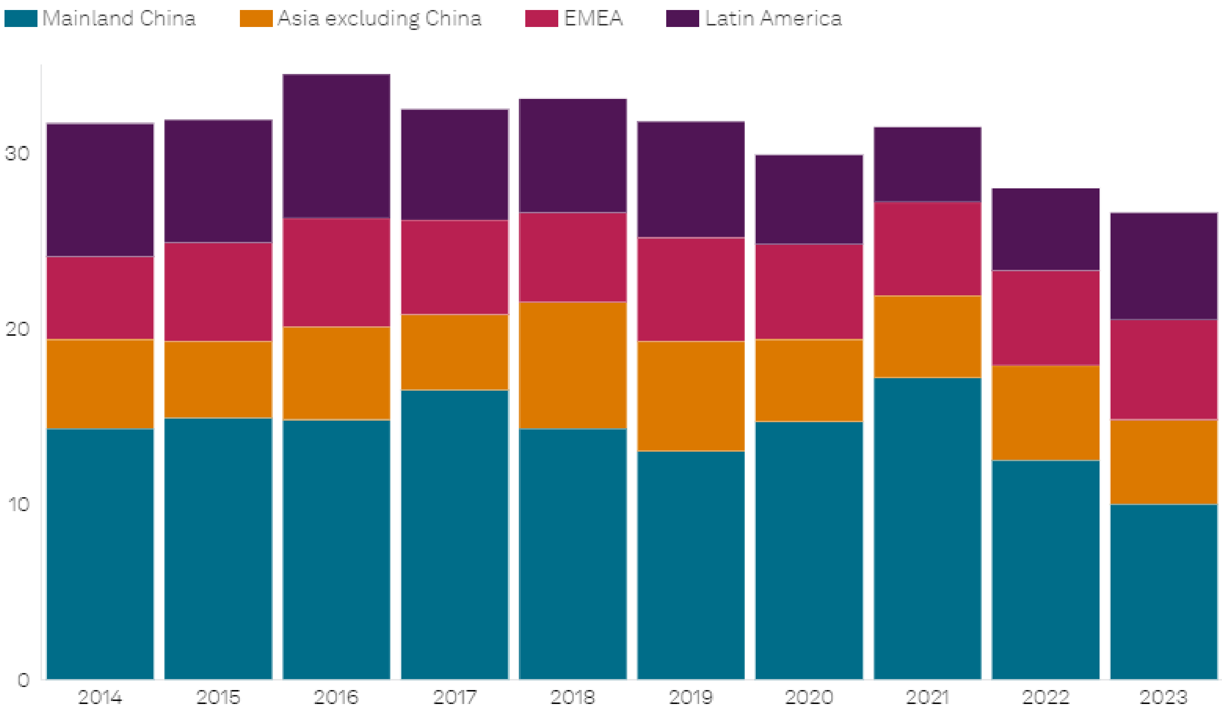
While some sectors, particularly apparel, will remain difficult to mechanize, over time, the push by developed economies to bring back local manufacturing jobs and by emerging markets to maintain economic growth will drive the need for companies to invest in both the manufacturing systems and the skills needed to maintain and develop new systems.

Thus far, the major emerging markets are experiencing a falling share of global investments in industrial automation products. In aggregate, in 2023, emerging markets imported only 30% of the $12.1 billion of global trade in industrial robots and similar products, of which China accounted for 12 percentage points.

Without a marked increase in investments across labor skills and support for manufacturing, emerging markets risk being squeezed between low-labor-cost frontier economies on the one hand and increasingly mechanized developed economies on the other.

Emerging markets' share of global industrial robot imports in decline (%)

Share of global imports of industrial robots and similar



Data compiled Aug. 28, 2024.
Source: S&P Global Market Intelligence.

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- Supply chain politics: National security meets economic growth
- Labor: A critical component of supply chains under growing pressure
- Exploring the post-election landscape for reshoring to India
- Semiconductor supply chain: Political and physical challenges in 2024 and beyond

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Fitting decarbonization into the power sector priorities of emerging economies

Emerging markets must navigate new challenges and opportunities to power their future while advancing their energy transition.

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Silvia Macri, Director, S&P Global Commodity Insights, silvia.macri@spglobal.com[8]

Highlights

Emerging markets must fit decarbonization into the policy and market priorities that have governed their power sectors' development to date, such as energy access and affordability, leveraging local resources and supporting primary domestic industries.

Renewable project competitiveness, power demand growth, nearshoring policies, corporate renewables procurement and clean hydrogen prospects offer substantial opportunities for clean energy investments in emerging markets.

Population growth, urbanization, economic development and electrification will create 620 TWh of additional power supply requirements in emerging markets — similar to Brazil's power needs today — every year for the next 15 years.

Decarbonizing emerging markets presents unique challenges and opportunities for clean energy. S&P Global Commodity Insights projects that between now and 2040, emerging markets will develop 5,800 GW of clean energy projects, corresponding to $5.1 trillion in clean energy capital expenditure.[9]

Average per capita electricity demand in emerging markets is less than a third of that in Organisation for Economic Co-operation and Development countries. Yet emerging markets typically have abundant renewable resources to meet growing energy needs affordably and sustainably. Governments and companies must overcome long-standing problems such as limited energy infrastructure funding and overreliance on fossil fuels to tap into these resources.

[8] Qingyang Liu contributed to this article.
[9] The S&P Global Commodity Insights definition of clean energy includes renewables — onshore and offshore wind power, solar photovoltaics, concentrating solar power, biomass and waste to energy, geothermal power and ocean power — plus battery storage.

Opportunities in emerging economies' electric power sector

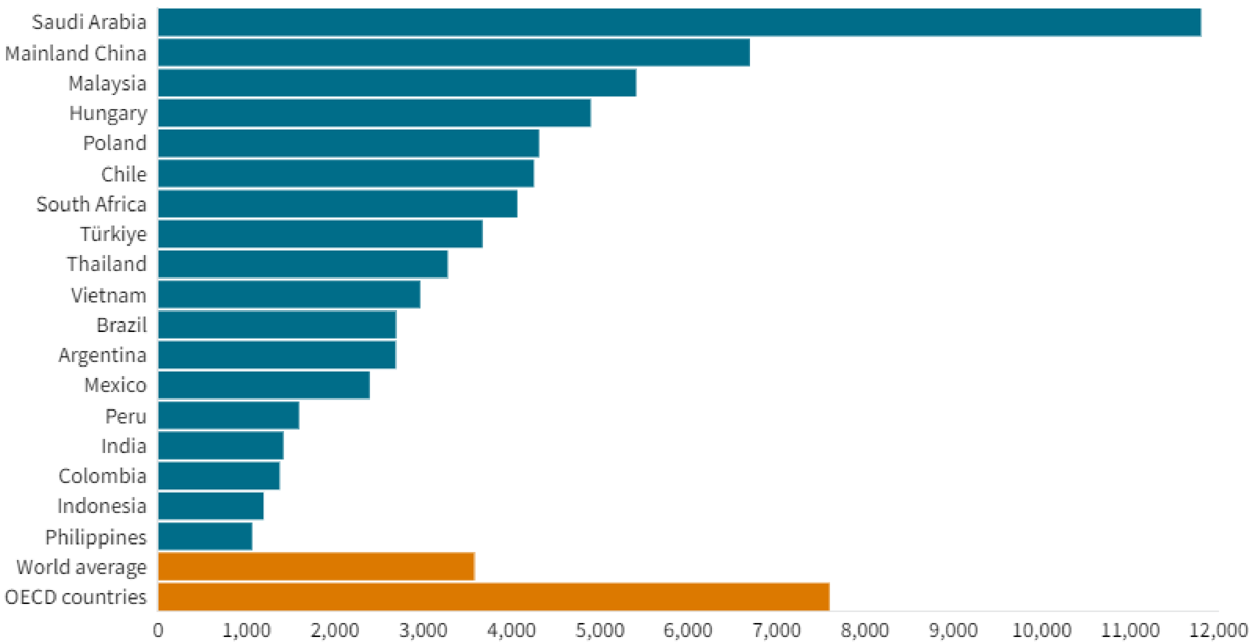
Emerging markets[10] house more than 50% of the world's population and hold about half of its power generation capacity, yet their energy demand potential remains largely untapped. Average electricity demand per capita, at about 3,600 kWh per year, is less than half of that in the more developed OECD countries. When excluding China, demand per capita falls to only 2,000 kWh per year, or roughly the same as a refrigerator.

From this starting point, the power needs of emerging markets will grow considerably in the coming decades. Population growth, urbanization, economic development and electrification will lead power demand to increase by more than 3% per year over 2024–2040, according to outlooks by S&P Global Commodity Insights, compared with about 2% in the rest of the world. This equates to about 620 TWh of additional power supply requirements in emerging markets — similar to Brazil's power needs today — every year for the next 15 years. China and India alone account for 465 TWh per year of this additional supply requirement.

Decarbonizing the power mix under these circumstances creates unique challenges and opportunities for private sector investment in clean energy. These markets are often marked by long-standing underinvestment in energy infrastructure, scarce public funds and foreign capital, and reliance on fossil fuels to produce more than 60% of electricity (or, in the case of some South American and sub-Saharan African markets, dominance of nonemitting but weather-dependent hydropower). In contrast, developed economies tend to offer ample government subsidies, such as the tax credits of the US Inflation Reduction Act; capital at more attractive interest rates; and many well-established business models for wind and solar projects.

[10] In this article, the term "emerging markets" refers to Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, the Philippines, Poland, Saudi Arabia, South Africa, Thailand, Türkiye and Vietnam.

Per capita electricity demand in emerging markets is well below the levels of developed nations (kWh/year)



As of August 2024.
Source: S&P Global Commodity Insights.

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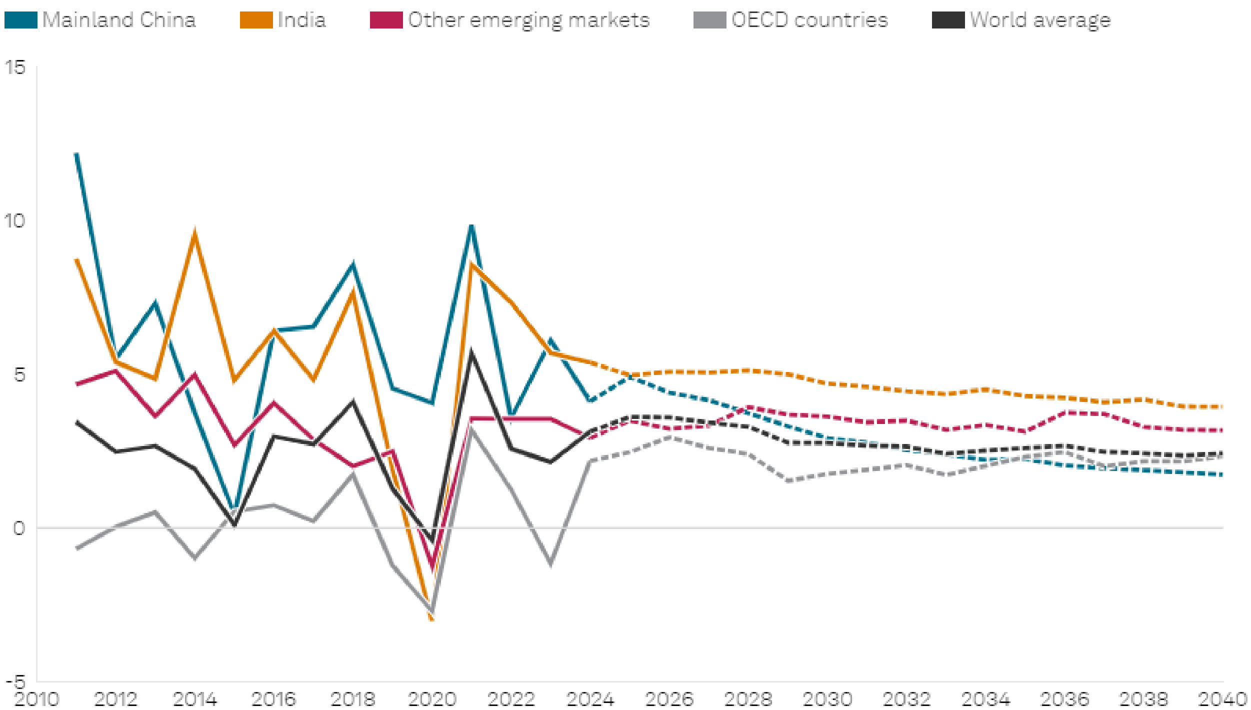
Global power usage to be steady to lower, on average (TWh)

Power demand outlook by region



As of August 2024.
Source: S&P Global Commodity Insights.

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Unique challenges to prioritizing the energy transition in emerging markets

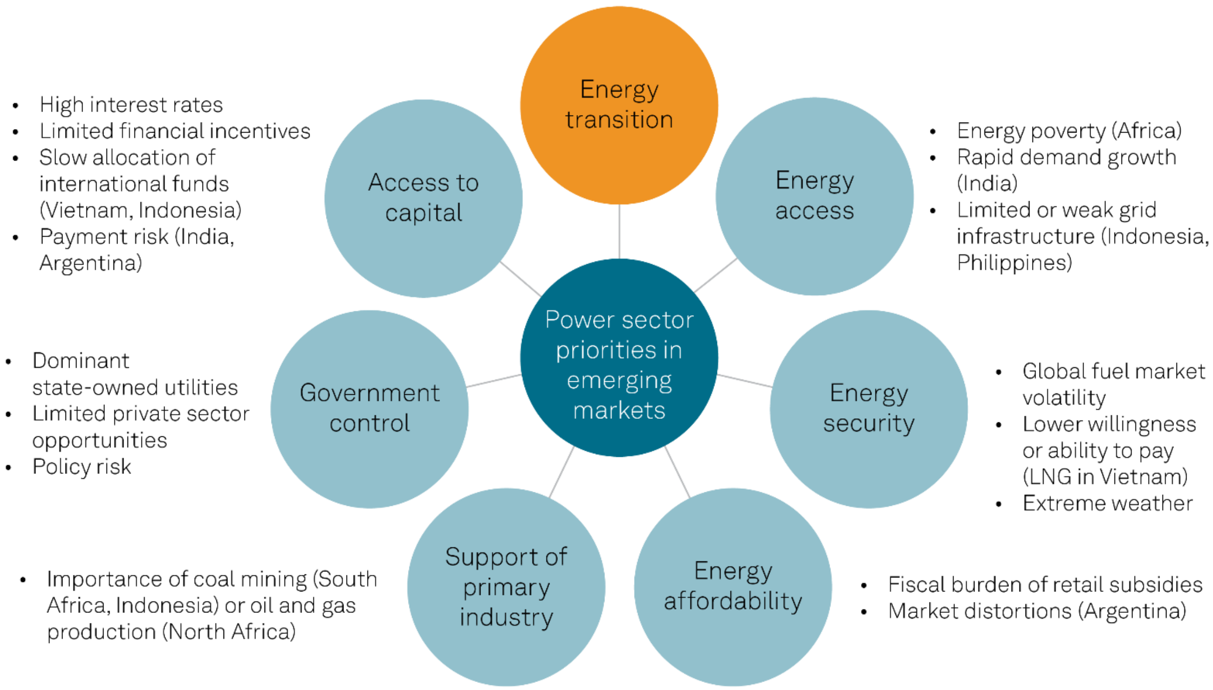
Emerging markets' long road toward decarbonization must fit within a set of policy and market priorities that has governed their power sector development to date. These priorities, in turn, affect the business models suitable for private sector investment in their renewable resources.

- **Energy access:** The demand growth expected in emerging markets places huge pressure on energy infrastructure. Long-standing underinvestment in the grid further complicates the deployment of variable renewable resources. Not all supply resources and business models are scalable at a fast pace, especially in emerging markets, where access to capital is often challenging.
- **Energy security:** The availability of local resources has been a main determinant in emerging markets' fuel choices. Domestic coal is cost-effective in South and Southeast Asia, conventional hydroelectric power is abundant in Latin America and

sub-Saharan Africa, and oil and gas are economical in other parts of Africa. Conversely, price swings in global LNG have constrained exposed Southeast Asian markets. Although emerging markets often have abundant renewable resources — and today, new wind and solar projects are typically competitive compared with existing conventional assets in terms of megawatt-hours supplied — the intermittency of these energy sources poses the problem of greater grid instability (an issue that has equally affected developed markets), thus accentuating concerns around reliability of the energy infrastructure.

- **Energy affordability:** This pressing need can dictate policy direction, with many countries offering subsidies that keep retail power prices artificially low for end users. This, in turn, can create market distortions and financial burdens for project developers, utilities, capital providers and governments in a way that does not occur in developed nations. These factors then alter the risk profile of investments. For example, in India, distribution companies incur losses from the gap between the average cost of supply and the average revenue realized from the retail sale of electricity. Government subsidies only partially compensate for these losses.
- **Support of primary industry:** In most countries in South and Southeast Asia and South Africa, coal is central to the broader economy and employs a large local workforce. In India, the government already indicated that coal would remain the backbone of the country's energy mix to support energy security. Business models for deploying renewables must regularly look to coexist with, rather than replace, these ingrained industries.
- **Government control:** The power sectors of many emerging markets can be highly regulated, limiting the role of private players. However, these markets also often require huge private capital injections, typically from abroad. This contrasts with most developed economies, where prices and private capital flow more freely to reflect market conditions. Emerging markets often require major reforms, such as clarifying the role of private players (South Africa), opening the wholesale market (Vietnam) or implementing tariff reforms (India).
- **Access to capital:** Companies struggle to obtain attractive financing when facing high inflation (Argentina), high interest rates (Türkiye) or foreign exchange risk (Hungary). Other barriers to investment include limited government incentives, offtaker risk and a history of low contract sanctity in some markets. As such, developing a project in an emerging market requires a different business evaluation than in developed nations that allocate billions of dollars in clean energy funding and tax rebates. Financing from multilateral institutions is often key, but delays in the distribution of funds, such as in Vietnam or Indonesia, can cause issues.

Energy transition vs. other power sector priorities in emerging markets



Data compiled June 2024.
Market examples are not exhaustive.
Source: S&P Global Commodity Insights.

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New market and technology trends create opportunities for clean energy investments in emerging markets

Emerging markets are already starting their energy transition. Nonconventional renewable additions averaged 100 GW per year over 2010–2023, with a record 356 GW of new builds in 2023 (59 GW excluding China). Trends vary significantly by region — China leads the world in many segments of the clean energy industry, Brazil and Chile attract substantial foreign capital for renewables, India and Southeast Asia promote renewable tenders and ambitious goals, and other markets such as Saudi Arabia and Peru still lag. Yet, looking forward, the pipeline of upcoming projects is increasingly tilted toward renewables across most regions. Several market and technology factors will likely accelerate this trend of clean energy investment in emerging markets.

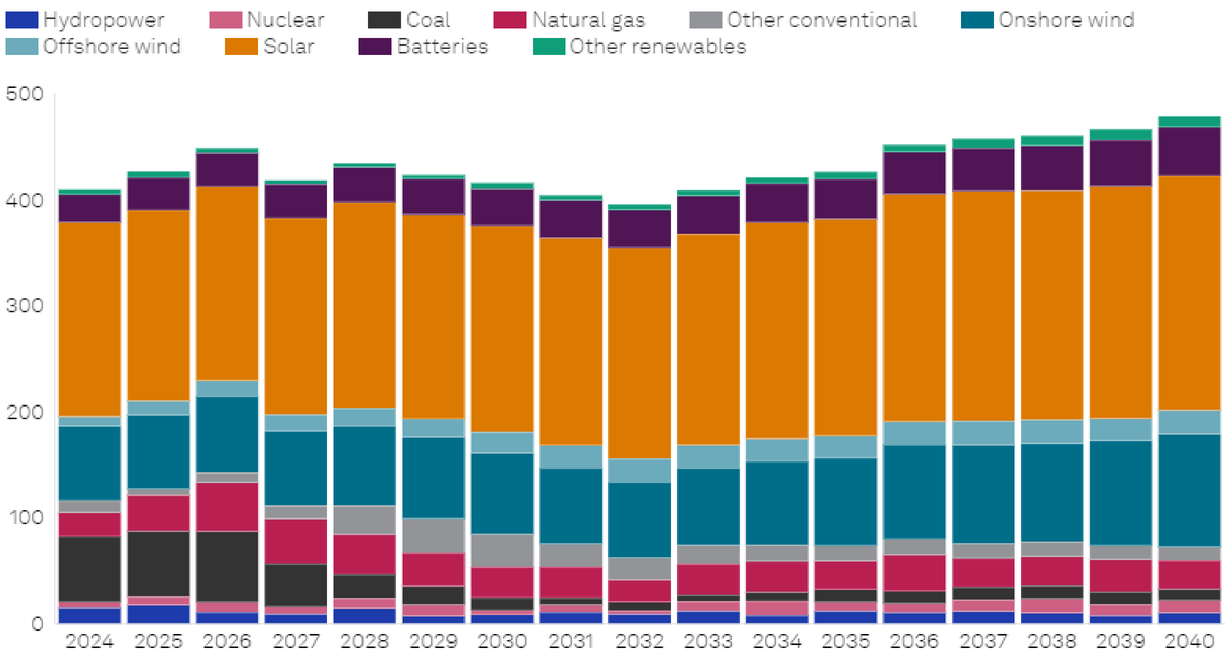
- **Renewable project economics:** The governments of many emerging markets are enacting policies to stimulate renewable investments despite limited funding or technical capacity. India, South Africa and Saudi Arabia recently completed renewables tenders, and various fiscal incentives are in place in India and Colombia. Meanwhile, the overall declining cost of renewable technologies, the increasing frequency of financing renewable projects and the rich natural resources of most emerging markets create commercial opportunities without the need for government support.

- **Power demand growth:** High demand growth means high investment needs that are unparalleled in most OECD countries. China will require 4,100 GW of additional power capacity over 2024–2040, India will need 600 GW, Brazil 160 GW, Mexico 80 GW and Indonesia 110 GW. Most of this new capacity is likely to be renewable. Furthermore, emerging economies are often dominated by large, energy-intensive industry such as mining, chemicals production, oil and gas exploitation and textiles fabrication. This creates new commercial opportunities to replace these traditional production methods with low-carbon intensity ones instead, contributing to both environmental goals and economic growth.
- **Nearshoring and friendshoring policies:** Rising global geopolitical tensions are leading governments and companies to gradually pursue "nearshoring" or "friendshoring" strategies, where they seek supply chain partners outside of China, creating potential opportunities for other emerging markets. As supply chain de-risking agendas take hold and the EU's Carbon Border Adjustment Mechanism begins, the low-cost and low-emission energy of renewables in several emerging markets, along with their low labor costs, will be more attractive.
- **Corporate clean energy procurement:** Corporations worldwide are increasingly procuring clean energy to reduce their emissions, including major players in Asian emerging markets signing new corporate renewable power purchase agreements. Furthermore, the materials and manufacturing sectors that are central to many emerging economies are now the principal offtakers of these clean energy deals. Several emerging markets are opening to the private sector to supply renewable PPAs. For example, in Southeast Asia, the governments of Malaysia, Indonesia, Thailand and Vietnam are opening third-party access to the grid to enable direct power trading between buyers and sellers. New regulation in South Africa has unlocked more than 20 GW of projects for the direct sale of renewable power to private offtakers.

- **Hydrogen export hubs:** Renewable energies in emerging markets may deliver large volumes of clean hydrogen and its derivatives to import-dependent markets, such as Europe, Japan and South Korea. For example, the EU aims to employ 20 million metric tons of renewable hydrogen per year by 2030, of which half is expected to be imported. As a result, governments in several emerging markets are announcing hydrogen strategies and road maps. Colombia's road map aspires to have 1-3 GW of renewable electrolysis capacity by 2030 and nearly $6 billion in annual hydrogen exports by 2050. Vietnam wants to produce 10 million-20 million metric tons of renewable hydrogen per year by 2050. According to S&P Global Commodity Insights, 180 GW of green hydrogen projects are under development, mostly in early planning, across emerging markets.

High demand growth in emerging markets will lead to substantial power capacity additions, mostly renewables (GW)

Outlook for annual gross power additions in select emerging markets



As of August 2024.
Reference case outlook.
Source: S&P Global Commodity Insights.

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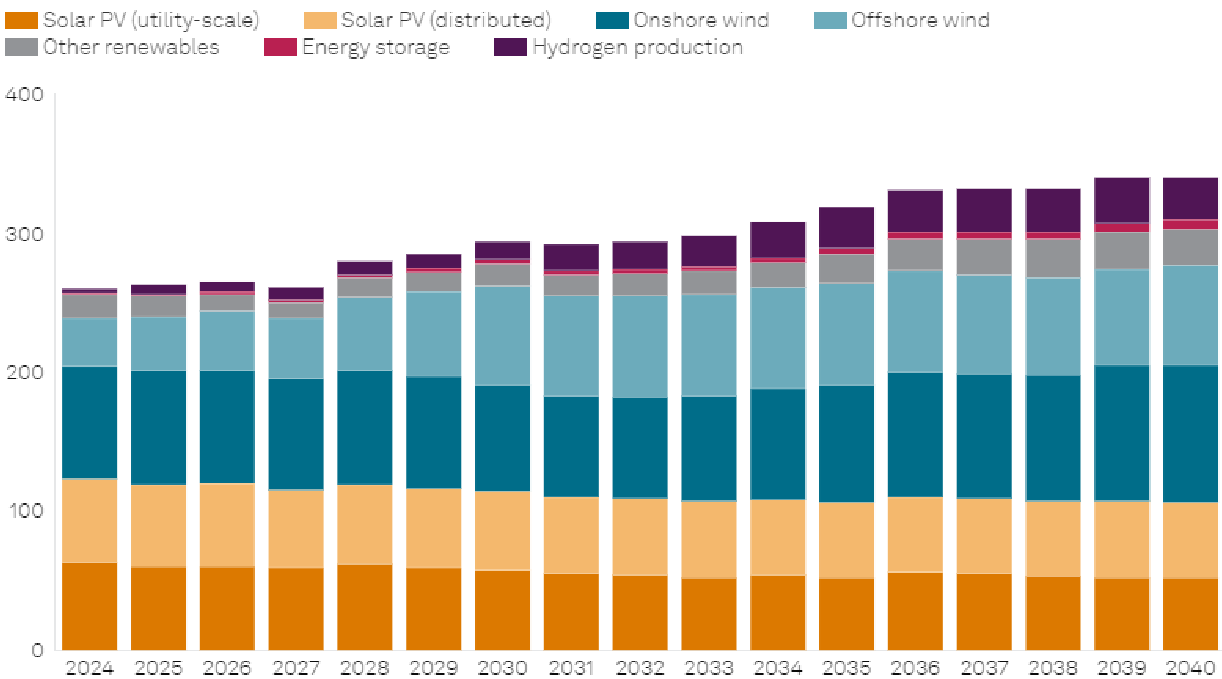
For the private sector, how to invest in the clean energy space of emerging markets will vary substantially with market structure, company capabilities and expertise, and investor risk appetite. However, the size of the overall pie is enormous: S&P Global Commodity Insights projects that, between now and 2040, emerging markets will develop 5,800 GW of clean energy projects, of which solar photovoltaics and wind assets represent about 60% and 30%, respectively. This build-out of generation capacity corresponds to $5.1 trillion in clean energy investment ($2.0 trillion excluding China).

Emerging markets to invest over $5 trillion in clean energies over 2024-2040 (US$B, real 2022)

Investments in renewable power and storage in select emerging markets, by technology



As of August 2024.
Source: S&P Global Commodity Insights.

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Looking forward

The energy transition will unfold differently in emerging markets than in developed nations given the former's unique challenges and opportunities. With persistent growth in electricity supply needs, abundant natural resources, diminishing technology costs and a growing body of favorable policies, a transition toward renewable energies is already underway. A diversified power mix using clean, domestic resources will enhance energy resilience and stability, ensuring a sustainable energy development trajectory for these regions.

Learn More

- Clean energy development in the "Global South" — challenges and opportunities in the electric power sector
- Which power markets globally are most attractive for renewable energy investments?
- Five trends that will define global power markets in the next 10 years

Biggest emerging sovereigns have the fastest debt growth

Public debt is rising in most emerging sovereigns, but so is their capacity to self-finance.

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Highlights

S&P Global Ratings projects government debt to rise in most major emerging market economies through 2030, albeit from modest levels compared to developed sovereigns.

Uncertain growth prospects and rising fiscal complaisance can hamper debt sustainability in emerging economies.

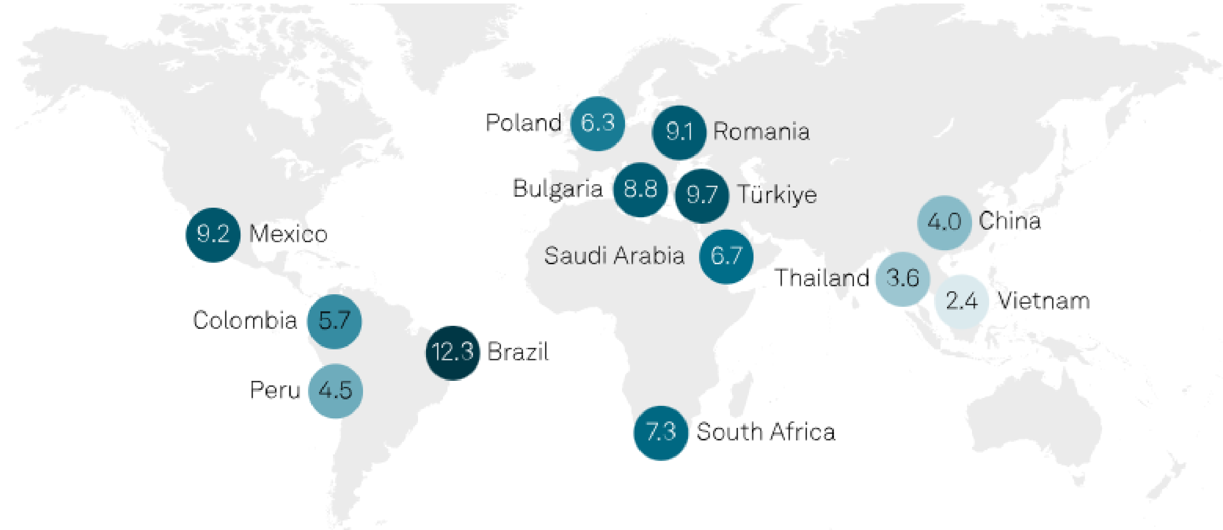
Lower foreign currency debt, improved external positions, higher (reserve) buffers and increased monetary policy effectiveness signal that most emerging markets are less vulnerable to global financial shocks than they were in previous decades.

The major emerging market economies are increasingly approximating developed ones: rising debt levels, rigid composition of public spending and flatter growth perspectives. On the other hand, increased institutional and monetary effectiveness, higher private savings, and lower net external financing requirements strengthen their capacity to sustain higher debt levels — just like developed economies.

Public debt is rising in emerging markets, albeit from modest levels

The shock to household and company incomes from the COVID-19 pandemic and the Russia-Ukraine war pushed emerging market governments to increase fiscal transfers to the private sector. The cost of this support explains why public debt levels in emerging market sovereigns are on average about 8 percentage points of GDP higher today than in 2019. But by developed market standards, government debt levels in the larger, wealthier emerging markets are still quite modest, at 50% of GDP.

General government debt increases most in largest emerging markets, 2023 vs. 2030 change (pps of GDP)



As of August 2024.
Source: S&P Global.

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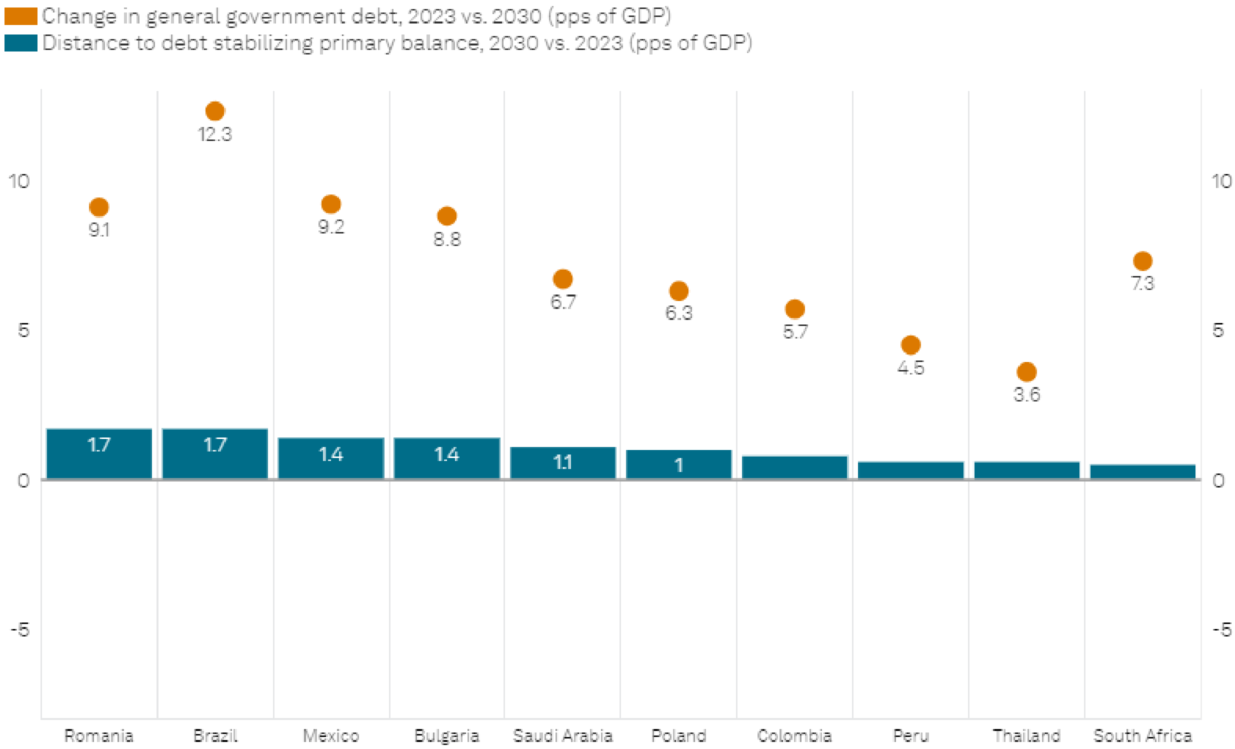
Fiscal complaisance is on the rise. S&P Global Ratings projects that most larger emerging market sovereigns will be unable to return debt to pre-pandemic levels by the end of this decade. Electoral pressures, aging demographics, declining growth and, in some cases, rising borrowing costs all combine to hinder debt reduction.

Among the group of 20 key emerging market sovereigns analyzed, we expect the debt-to-GDP ratio to rise by more than 5 percentage points between 2023 and 2030 for nearly half — Brazil, Bulgaria, Colombia, Mexico, Poland, Romania, Saudi Arabia, South Africa and Türkiye. Of the emerging markets with GDP over $300 billion, only Chile, India, Indonesia and the Philippines are projected to lower their debt-to-GDP ratio during this period. To stabilize their debt ratios, emerging market sovereigns would need to adjust their underlying general government deficit between 0.5 percentage point of GDP (South Africa) and 1.7 percentage points (Romania) by 2030. In most cases, we do not expect governments to make these fiscal adjustments.

Largest emerging markets countries are furthest from stabilizing debt by 2030



As of August 2024.
Source: S&P Global.

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Emerging markets are not approaching a fiscal crisis

To fully understand fiscal sustainability, it is important to examine both financing and borrowing trends. While borrowing by emerging market governments is increasing from relatively low levels, domestic financing prospects today are better than before. For example, savings rates are now higher than 20 years ago in many prominent emerging markets, exceeding 30% of GDP in China, India, Indonesia, Saudi Arabia and Vietnam. In economies with such high savings rates, public sector deficits are almost inevitable.

Higher savings rates underpin larger domestic financial sectors, with more capacity to allocate private savings to finance the government. We estimate that current surplus financing capacity (financial sector assets excluding claims on the public sector) exceeds 100% of GDP in China and Vietnam; 70% in Chile, Saudi Arabia and South Africa; and 50% in Brazil, India and the Philippines.

Emerging market net external borrowing is also far more muted today than prior to the Latin American debt crisis of the 1980s, Asian financial crisis of 1997–1998 or the global financial crisis of 2007–2010. Of the 20 major emerging market economies rated by S&P Global Ratings, only Romania has account deficits exceeding 4% of GDP, largely a reflection of the magnitude and recurrence of EU capital inflows. Low or no net external financing requirements from major emerging market sovereigns insulates them from the balance of payments crises that were the norm before 2011.

Finally, foreign currency debt represents less than 30% of government debt for most emerging markets. In larger sovereigns such as China, India, Mexico and South Africa, foreign currency debt represents less than 15% of total sovereign debt. This shields these major emerging market borrowers from shocks due to volatile exchange rates or trade imbalances.

None of the macroeconomic frailties, such as low gross savings and large external deficits that contributed to regional financial crises since the 1980s, are present in key emerging markets today. Lessons from past crises have convinced emerging market policymakers, especially, but not exclusively, in Asia, to build foreign currency reserves and limit private sector leverage. Dollarization and foreign currency exposures are primarily limited to a few smaller, more vulnerable sets of emerging markets. Surging domestic savings and more credible monetary policy settings mean the capacity of emerging markets to sustain higher levels of public debt is increasing. However, this does not eliminate risks to emerging market fiscal sustainability.

Medium-term risks to emerging market fiscal sustainability

The two main fiscal risks for emerging market sovereigns are an uncertain outlook for growth and the inability to increase tax receipts.

The future trajectory of emerging market growth will be a key determinant of fiscal outcomes for the rest of this decade. Several concerns exist in this regard. For China, an aging population, property woes, weakening consumer sentiment and few measures to support household spending suggest future moderate consumption growth and a potential risk for deflation, which would impact fiscal outcomes. Private oversaving in China, with a gross savings rate of 44% of GDP, may be a logical response to aging demographics and a narrow social safety net. But amid a slowdown in investment activity in the property sector, it can also constrain consumption growth.

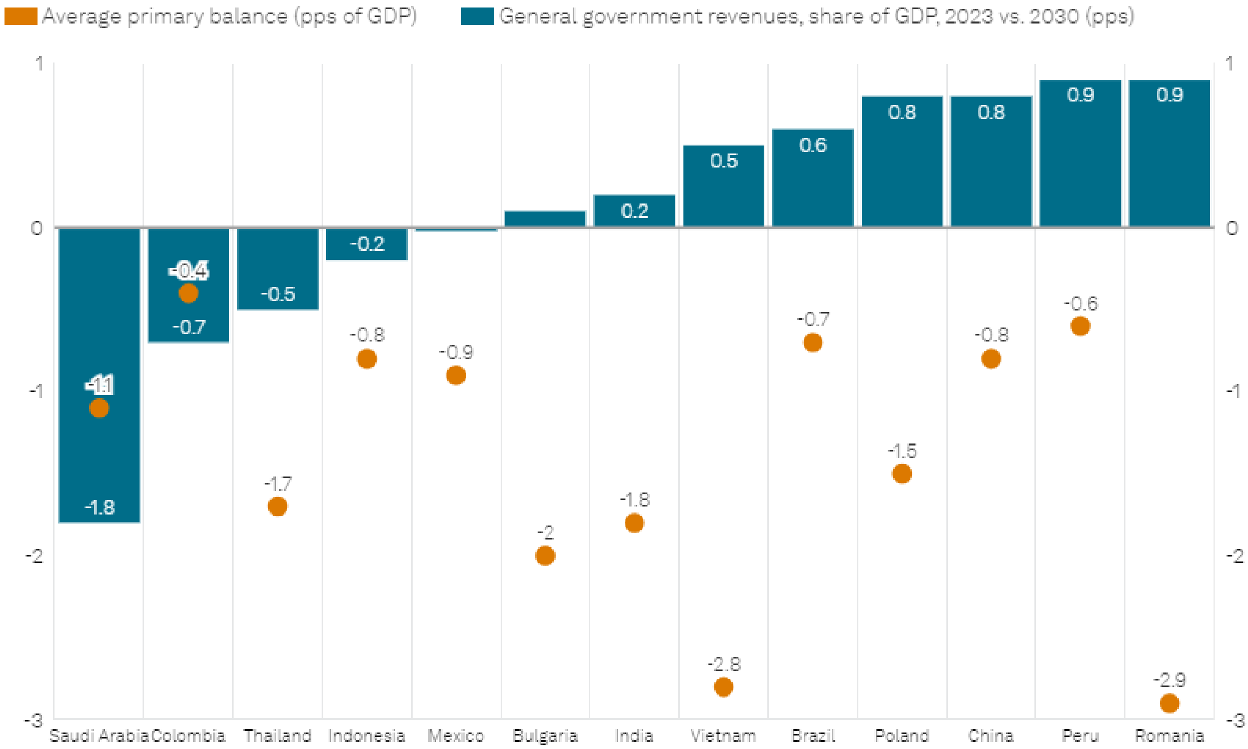
Supply side constraints cap growth rates in emerging markets. In Mexico, years of underinvestment, especially in infrastructure such as energy and electricity, have constrained the economy. Hungary's big bet on the electric vehicle sector and its trade-intensive economic model make it vulnerable to deglobalization while its population declines and ages. In South Africa, recurrent power outages and logistical bottlenecks have weighed on activity, limiting per capita GDP growth to just above 0% for nearly five years. Those factors also challenge South Africa's manufacturing, mining and export sectors. While some investment in alternative energy infrastructure has progressed, the new coalition government faces challenges in reducing high structural unemployment and stimulating private investments (see "Planning for the future: Growth targets for the next decade" to learn more).

Türkiye's growth challenges differ: cooling down a recently overheated economy while restoring trust in the Turkish lira. Second-quarter 2024 GDP results confirmed a significant deceleration in Turkish consumption growth. However, the bigger question is whether Türkiye's private consumption, about 60% of GDP in 2023, can stomach real income cuts for long enough (i.e., until 2026) so that inflation can return to single digits without significantly hampering the country's growth prospects.

Weaker-than-projected emerging market growth may pose a serious risk to their public finances over the longer term — particularly if accompanied by deflation (i.e., China) — as aging demographics and excessive private savings may lead toward Japanese levels of public debt but without Japanese levels of development, wealth generation and currency status.

The second risk to emerging market fiscal sustainability is low tax receipts. Emerging market sovereigns collect an average of 23% of GDP in government revenues, more than 10 percentage points less than the Organisation for Economic Co-operation and Development developed sovereign average. Indonesia collects less than 15% of GDP in revenue, while Mexico and Vietnam collect only 18% each. There are political and institutional limitations to taxing the informal economy, particularly where populations have low confidence in the quality of public services and the integrity of government officials. We project that most emerging market countries in our analysis will grow their revenues by no more than 1% of GDP over the next seven years, while their primary balances will remain negative.

Modest revenue raising capacity drags emerging market fiscal performance



As of August 2024.
Source: S&P Global.

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Fiscal pressures are more pressing for frontier sovereigns

Fiscal pressures are more acute in frontier sovereigns, another category of emerging markets. S&P Global Ratings defines frontier sovereigns as those with low per capita income, below $2,500 in GDP. Compared to emerging markets, frontier sovereigns typically face more pressing economic and financing challenges, more concentrated economies and export baskets, and political institutions at earlier stages of development. Other characteristics of frontier markets are low private savings rates, volatile external accounts, and more modest domestic financial sectors and markets. In Angola, Ghana, Nigeria, Pakistan, Uganda and Zambia, the surplus financing capacity of domestic banking sectors is below 20% of GDP, three to five times lower than that of key emerging markets.

Faced with a series of external shocks, frontier sovereigns, like other governments, needed to raise additional financing to mitigate the fallout on households caused by the COVID-19 pandemic and higher food and energy prices following Russia's 2022 invasion of Ukraine. Their search for additional financing coincided with the world's most influential central banks shifting to a tightening cycle, raising borrowing costs and effectively shutting down access to foreign capital markets.

Foreign currency debt comprises a far higher share of debt in frontier markets compared to other emerging markets — about 66% of general government debt versus less than 30% for other emerging markets. Due to a large reliance on imported food, fuel and consumer goods, economies such as Egypt and Ghana have also found difficulty regaining external competitiveness and rebuilding foreign currency buffers via exchange rate devaluations, as the pass-through effects of devaluations on domestic inflation have generally been higher since 2020 compared to historical levels.

All of the above pushed many frontier governments to the brink of bankruptcy. Between 2019 and 2023, gross general government debt for frontier economies increased by 12.8 percentage points to 75% of GDP on average. The cost of interest payments on this debt exceeded 30% of all government revenues in Egypt, Ghana, Nigeria and Zambia.

By 2030, we forecast that, on average, the aggregate frontier sovereign debt-to-GDP ratio will decline to 63% of GDP. Frontier sovereigns should manage to reduce debt through front-loaded fiscal consolidation, as seen under International Monetary Fund programs in Egypt and Kenya; real effective exchange rate appreciation, as projected in Angola; or defaults, as have occurred in El Salvador, Ethiopia, Ghana and Zambia. Frontier market policymakers are adopting these measures to rein in spending and introduce new taxes, as domestic and external financing constraints leave them with no other viable options.

Learn More

- Credit Conditions Emerging Markets Q4 2024: Risks Loom Amid a Fragile Stability
- Economic Outlook Emerging Markets Q4 2024: Lower Interest Rates Help as Pockets of Risk Rise
- Emerging Markets Monthly Highlights: Fed Easing Sets The Stage For More Cuts
- Sovereign Ratings List

Multilateral lending institutions and private sector capital mobilization for climate action and development

Multilateral lending institutions face increasing pressure to expand their developmental capacity by channeling private sector funds to emerging markets, which may require changing their business model.

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Highlights

Members of the Group of 20 (G20) major developing countries and developed nations have intensified pressure on multilateral lending institutions (MLIs) to deliver more financing as the world falls significantly behind meeting commitments under the UN's sustainable development goals by 2030.

The MLI sector's current operating model seems to be lagging in its capacity to sufficiently scale up private capital mobilization.

Obstacles to scaling up private sector investments remain similar to the past. The lack of solid institutional support and low capacity or appetite for public funds to provide first-loss equity or mezzanine-like financing prevents greater mobilization. Foreign exchange risks also persist.

G20 members have called on MLIs to spearhead channeling private sector funds to tackle development ambitions and climate action goals, especially in emerging and frontier markets, but progress has been slow. Emerging market sovereigns have also raised this concern as investment needs exceed available financing sources. Both groups have called for MLI sector reforms to help overcome these mobilization challenges. Improvements are needed — mobilization volumes in low- and middle-income countries have only grown marginally compared to high-income countries, where that growth is double.

Private sector mobilization has not increased meaningfully in the past 5 years

G20 members have intensified pressure on MLIs to deliver more financing as the world continues to fall significantly behind on meeting commitments under the UN's sustainable development goals by 2030. The G20 also aims to close the estimated financing gap in the climate transition toward net-zero emissions by 2050. Estimates on the annual financing gap amount to approximately $4 trillion in low-income countries, according to the UN Conference on Trade and Development, a significant increase from $2.5 trillion in 2014.

Physical risks from climate change are increasing, and their economic and financial impacts are likely to rise with time, especially if mitigation and adaptation efforts are not accelerated. By 2050, if global temperature increases do not stay well below 2 degrees C, up to 4.4% of the world's GDP could be lost annually, absent adaptation. This will test countries' adaptation plans, particularly among lower-income nations that are disproportionately exposed and less able to prevent permanent losses. According to the United Nations Environment Programme Annual Report 2023, the adaptation finance gap is 10-18 times above current international flows. Estimated annual adaptation needs range from $215 billion to $387 billion, or 0.6% to 1% of developing countries' GDP, per year for this decade.

As public funds fall short of needs, the G20 announced after the 2023 IMF-World Bank meetings in Marrakech, Morocco, its ambitions to deliver bigger, better and more effective multilateral development banks by enhancing operating models and substantially increasing their financing capacity to maximize development impact, with private sector mobilization playing a key role.

The MLI sector's current operating model seems to be lagging in its capacity to sufficiently scale up private capital mobilization. However, the sector's own lending increased 30% to about $200 billion annually in 2020, compared with $150 billion in the previous five years, and has roughly remained at that level. This was a significant increase beyond our expectations, but the bar is now higher for further expansion. Private sector capital mobilized to low- and middle-income countries has only grown 10%, to $65 billion in 2022 from $60 billion in 2017, partly reflecting a lack of explicit targets and steering models to increase mobilization.

Opportunities and challenges

Structural improvements may lead to higher mobilization. The World Bank Group has launched a new scorecard, which proposes including a key variable that measures the mobilization of private sector capital. IDB Invest's strategic focus on mobilization first launched in 2022 and was reinforced in 2024 with a $3.5 billion capital increase explicitly linked to scaling up mobilization.

We expect that further targets and changes to business models will be launched by the asset class to enable a structural increase in mobilization of private capital, which, in our view, is set to receive shareholder support.

But obstacles to scaling up private sector investments remain similar to the past. Potential projects that can be mobilized face challenges in many low- and some middle-income countries. Often, a lack of solid institutional support and low capacity or appetite for public funds to provide first-loss equity or mezzanine-like financing prevent greater mobilization. Additionally, foreign exchange risks persist.

MLIs' loans to sovereigns are not priced to account for credit risk, making private sector capital mobilization difficult due to low returns compared with other investments. Sovereign loans comprise about two-thirds of the overall loans on MLI balance sheets, while the remainder are direct private-sector corporate and financial institution loans of $250 billion and $400 billion, respectively — significantly reducing the capacity for mobilization.

When turning to climate financing, loan volumes in the sector have ramped up significantly over the last five years, but mobilization levels for low- and middle-income countries have yet to recover to pre-COVID-19 levels. While MLI lending has grown, private sector mobilization in these countries was lower in 2022 at $16.9 billion, compared to $21 billion in 2019.

We believe that G20 members considering MLIs essential to accomplishing both sustainable development and Paris Agreement on climate change goals is a testament to their relevance and policy mandates. Support from major global shareholders may become more contingent on meeting mobilization targets. If shareholders prioritize mobilization, we would consider this a progressively more important factor when assessing future shareholder support. However, we believe the overall ratings impact to be limited at this point.

But if mobilization becomes a key focus area, our assessments of both enterprise and financial risks may change. This could have a negative impact on our assessments if entities take on significantly more risk — i.e., in first loss structures, without proper capitalization — or if these new risks are not being managed well. Conversely, successful mobilization with increased shareholder support could positively affect our view of the mandate and the relationship with shareholders.

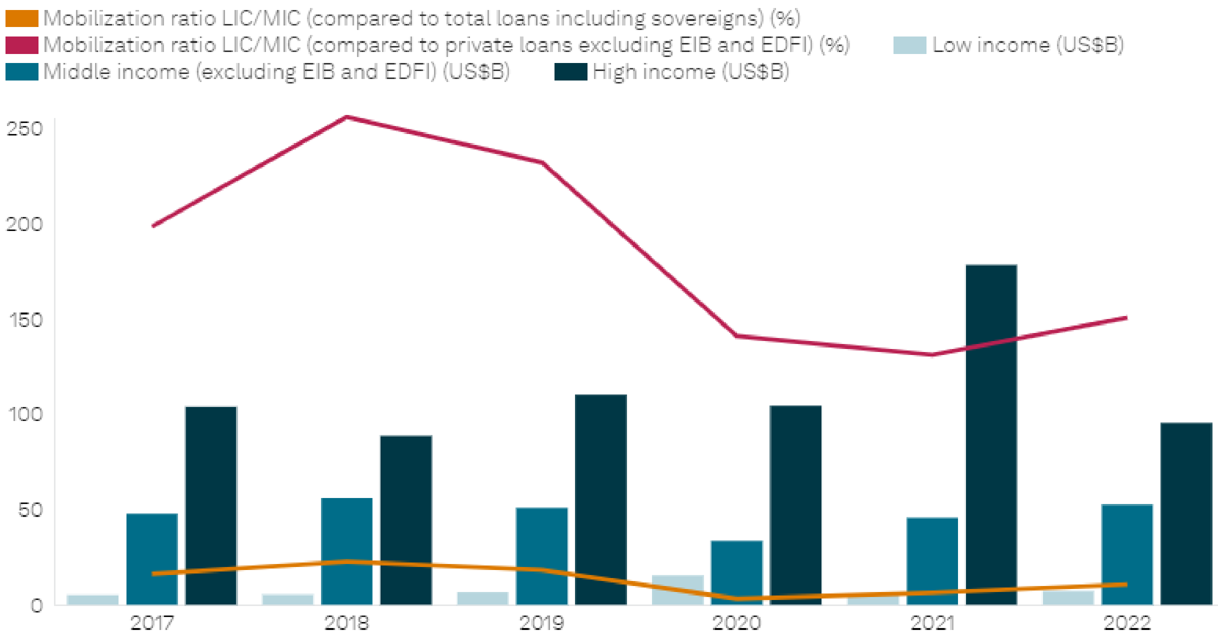
Financing gaps remain vast

Since 2017, when the MLI sector first started reporting mobilization numbers in a common publication, mobilization rates compared to commitments in low- and middle-income countries have deteriorated, while the amounts mobilized have remained stable, between $50 billion and $65 billion annually. Mobilization amounts can be measured against total new loans extended by the MLIs or by the private sector — and depending on which, the outcomes are very different. When measuring against all loans, each dollar committed leads to a mobilization of an additional 30 cents. This increases significantly, to almost

$1.8 per dollar committed, when measuring against private sector loans, where the vast majority of all mobilization takes place. This highlights the difficulty in mobilizing even small amounts against loans extended directly to sovereigns, which are based on concessional terms.

Private sector mobilization in LIC, MIC has been near flat since 2017

Mobilization of private sector by country income level



Data compiled May 2024.
EIB = European Investment Bank; EDFI = European Development Finance Institution; LIC = low-income countries; MIC = middle-income countries.
Source: "Mobilization of Private Finance by Multilateral Development Banks and Development Finance Institutions" reports, 2018–2022, International Finance Corp.

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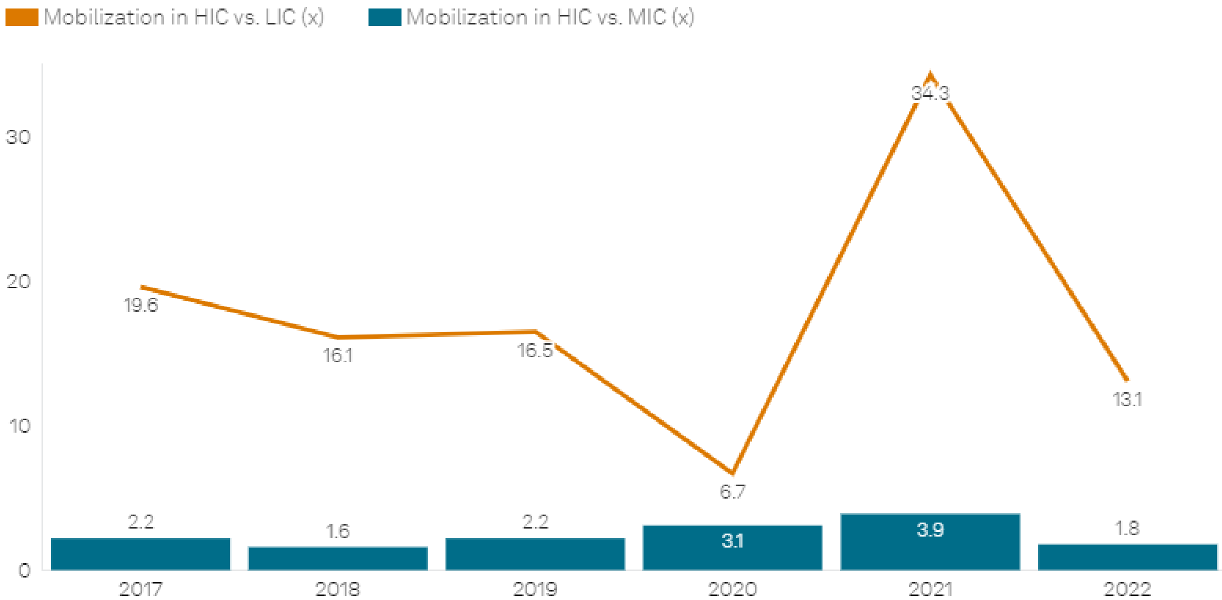
The significant drop in the total ratio in 2020 and 2021 resulted from the sector quickly increasing its disbursements to respond to the effects of the COVID-19 pandemic, when most of the disbursements went directly to sovereigns. Private sector disbursements and overall mobilization volumes remained relatively intact, though boosted by one outlier transaction in Mozambique.

Mobilization volumes in high-income countries range from two to four times those in low- and middle-income countries despite commitments being roughly the same. Moreover, high-income countries see mobilization volumes 20 times greater than low-income countries on average. This divergence reflects the root cause of the problem of mobilization and private sector investors' preferences. In general, the political environment and sovereign risk, project pipelines, foreign exchange risks, absence of first loss structures, and capacity to undertake larger projects are all obstacles that investors cite when considering projects in low-income countries that are not present to the same degree in high- and middle-income countries.

Mobilization multiple of HIC vs. LIC still remains on average at 15x despite fall in 2022

Mobilization comparison high-income countries with low- and middle-income countries of private sector by country income level



Data compiled May 2024.
HIC = high-income countries; MIC = middle-income countries; LIC = low-income countries.
Source: "Mobilization of Private Finance by Multilateral Development Banks and Development Finance Institutions" reports, 2018–2022, International Finance Corp.

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Not all MLI lending is well suited for mobilizing private sector capital

Sovereign loans from MLIs are concessional in nature. MLIs expect priority repayment in a distressed situation given the preferred creditor treatment principle. Therefore, since private sector investors often want a cushion against losses to be borne by public resources, MLIs are not always a great fit as they often are the first to get paid.

However, some structures in the private sector can attract significant interest from private investors. Although it did not originate from the MLI sector, a landmark liquefied natural gas project in Mozambique in 2020 created an unprecedented surge in private mobilization. The African Development Bank was part of a syndicate, and given its close connections with the central government, it helped mitigate political risk and provide robust screening of the developmental impact. This indirect mobilization, where an additional $12.9 billion was committed, represented almost 90% of the total volume for low-income countries. Such projects are rare and are typically owned by foreign operators, and revenue streams from the gas project were secured by offtake arrangements with mostly foreign purchasers (more than 85% of total production).

Are markets ready to receive large inflows of private sector capital?

Mobilization of private capital is less likely in sovereigns already in or nearing distress. Concessional MLI loans and grants are often among the few viable options for these sovereigns to finance infrastructure projects because most market-based financing would be too expensive.

Social infrastructure, such as schools, hospitals, clean water and non-toll roads, is often difficult to cofinance with private sector investors and may not proceed unless undertaken by the sovereign itself.

Climate financing in low- and middle-income countries is faring better than other sectors

Private-sector mobilization volumes in high-income countries range from 1.5 to three times those in low- and middle-income countries despite similar commitments. This indicates a smaller difference in private-sector mobilization for climate financing between these groups, supported by the overall trend toward climate financing.

However, the vast majority is directed toward climate mitigation. Adaptation projects struggle to attract private investors and to find private actors to lead the projects.

Over 2019–2022, mobilization of private sector resources into climate financing in low- and middle-income countries reached an average $17 billion, or about 140% of own committed resources to the private sector. Both dropped significantly in 2020, and mobilization numbers have not yet rebounded to pre-COVID-19 levels. In addition, only one-third of that is direct mobilization, where the MLI takes an active role leading a syndicate and attracting private investors.

Risk diversification, more standards wanted

MLIs have significant experience in structuring projects and advising on policy work. In our view, investors might direct more funds to emerging and frontier markets, enabling significantly more financing, if the overall investment climate improved. We believe that additional support from MLIs in the form of advice for policy reforms, helping to build up local capacity to bring projects to a bankable stage and, in general, improving the investment climate, could support more substantial private investment. We are also observing various initiatives, such as bundling assets, to provide risk diversification and scale, which could address roadblocks to private investors' mobilization needs.

Investors are seeking different structures, where the first loss and the mezzanine part of the structure are borne by others to meaningfully increase their exposure to emerging and frontier markets. This would require more risk and likely more equity and high-risk exposures on MLI balance sheets. While this involves trade-offs, as it consumes more capital, it has the potential for a larger impact and more significant mobilization.

Investors want more standardization and pools of projects rather than bespoke small-scale assets. We believe that MLIs have significant experience structuring deals and applying best practices. They can build up project pipelines and streamline project assets by further educating market participants in emerging and frontier markets. We believe this would also eventually reduce their own costs when analyzing deals.

However, even with better standardization and pooling of projects, regulatory capital requirements remain a roadblock to increasing private capital mobilization. Investments in securitized assets, including senior tranches, often have regulatory capital requirements that are a multiple of what insurers' and banks' internal risk assessments would suggest, deterring them from investing in such structures despite the risk diversification benefits and credit enhancement.

MLIs have traditionally been governed by their own volume delivery — both from a client perspective and internally — to reach goals and deliver impact. The industry's growing emphasis on the more effective use of resources has prompted shareholders to reconsider the current business model, aiming more toward impact outcomes and delivery of private capital mobilization.

Learn More

- A Closer Look At The G-20 Expert Panel Review Of MLIs' Capital Adequacy Frameworks
- Sustainability Insights: Shareholders Are Calling On Multilateral Lending Institutions To Increase Private-Sector Capital Mobilization For Climate And Development
- Sustainability Insights Research: Lost GDP: Potential Impacts Of Physical Climate Risks

Key terms and definitions

We have selected a list of key terms used throughout this *Look Forward Journal*. We offer these definitions to provide readers with a clear understanding about the scope of each concept, which can vary across different research outlets.

Emerging markets: For the purpose of the articles of this *Look Forward Journal*, S&P Global defines "emerging markets" as countries that have been or are transitioning toward middle-income levels, with good access to global capital markets (including sovereign and domestic corporations and financial institutions), deepening domestic capital markets, and global economic relevance based on economic size, population and share in global trade. In our article series, we focus on Argentina, Brazil, Chile, China, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Peru, the Philippines, Poland, Saudi Arabia, South Africa, Thailand, Türkiye and Vietnam. Some articles include additional countries within the scope of our definition to emphasize our arguments or to present the reader with additional examples that support our insights.

Frontier markets: S&P Global defines "frontier markets" as countries with per capita income below $2,500 GDP. These countries face economic challenges and financing needs. They rely on international institutions, including the International Monetary Fund's Poverty Reduction and Growth Trust, for vital policy and financial support. They have shallow and narrow domestic capital markets that are often underdeveloped. These economies are also characterized by political instability, inadequate regulation, substandard financial reporting, weak liquidity and large currency fluctuations. Their economies are often concentrated in very few sectors or commodities.

In our article "Multilateral lending institutions and private sector capital mobilization for climate action and development," we use additional definitions to classify countries. This is because multilateral institutions use country income classifications in their underwriting criteria. The income classification definitions below are fully aligned with World Bank guidance, which is updated regularly. Countries classified within the lower-income, lower-middle-income and upper-middle-income categories can also be classified within our frontier or emerging markets thresholds.

Low-income countries: Countries with gross national income (GNI) per capita equal to or below $1,135.

Lower-middle-income countries: Countries with GNI per capita between $1,136 and $4,465.

Upper-middle-income countries: Countries with GNI per capita between $4,466 and $13,845.

High-income countries: Countries with GNI per capita above $13,845.

For more details and updates on these definitions, please refer to the World Bank Group country classifications by income level.

SSP3-7.0: A moderate- to high-emissions scenario, akin to a slow transition, in which countries increasingly focus on domestic or regional issues, with slower economic development and lower population growth. A low international priority for addressing environmental concerns leads to rapid environmental degradation in some regions. This SSP projects a global temperature increase of 2.1 degrees C (1.7 degrees C-2.6 degrees C) by 2050 or 3.6 degrees C (2.8 degrees C-4.6 degrees C) by the end of the century.

Energy transition financing gap: In our articles, we discuss a financing gap that refers to the resources needed to achieve each country's energy transition objectives. Such objectives could be defined by domestic state policy guidelines or fully aligned with the UN's sustainable development goals. In most cases, the amounts needed to achieve sustainable goals are significant and difficult to finance, leading to a financing gap.

EU Corporate Sustainability Due Diligence Directive (CS3D): This directive was approved by the Council of the European Union on May 24, 2024. It stipulates that EU-based companies and non-EU companies operating in the European single market with more than 1,000 employees and global revenue exceeding €450 million are legally bound to ensure that their supply chains neither harm the environment nor violate human and labor rights. Implementation will occur in stages between 2027 and 2029, based on company size.

Strategic Opportunity Index™ (SOI™): The Strategic Opportunity Index™ measures the state of a market and its potential to generate opportunity for enterprise, encompassing a range of factors. The SOI™ draws on market-level data for over 90 markets, covering more than 98% of global GDP. The aggregate scores and ranks of each market and the state of the macro environment have been constructed on an annual frequency since 2014. The data provides users with current and historical telemetry on the economic, regulatory, policy, institutional, logistics, supply chain, trade and resource questions through normalized data.

- The SOI™ Momentum Score measures how the markets have changed over the past 10 years from the perspective of the index. Momentum scores are calculated from compound annual growth rates and normalized to provide a comparable score that focuses on the trajectory of the country, regardless of the current SOI™ ranking. Markets with the most improvement rank highest on momentum scores. This approach helps users understand and identify markets where opportunities are expanding.
- The SOI™ Policy Favorability Score measures the extent to which government policies, regulations and tax code support and encourage new enterprise.
- The SOI™ Institutional Quality Score measures the strength and effectiveness of a country's institutions, such as legal and financial institutions.
- The SOI™ Logistics Efficiency Score measures the effectiveness and reliability of a country's logistics and supply chain infrastructure.

- The SOI™ Market Potential Score measures the extent to which the domestic market is open, innovative and attractive for new business opportunities.
- The SOI™ Resource Availability Score measures the accessibility and adequacy of the necessary resources for conducting business operations in a given market, specifically labor and capital.

About the S&P Global Emerging Markets Research Lab

The Emerging Markets Research Lab, launched in February 2024, brings together experts from all divisions and functions of S&P Global to uncover the unique insights and trends shaping emerging markets today and in the future. The Lab seeks to foster collaboration and debate on the strategic opportunities and risks for emerging markets, aiming to generate high-value thought leadership across S&P Global. Throughout 2024, our focus has been on the following key areas:

- Long-term economic prospects
- Supply chains
- Geopolitics
- Demographic trends
- Energy transition
- Climate vulnerabilities
- Governance and policy stability
- Public debt and fiscal sustainability

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