European Commission

Reducing Inequality through Global Gateway

A Strategic Role for the Private Sector.

Acknowledgements

The report *Reducing Inequality through Global Gateway: A Strategic Role for the Private Sector* was developed by the Directorate-General for International Partnerships (DG INTPA), with contributions from Eduardo Ortiz-Juarez (consultant) and Mathilde Cournut.

The development of the report benefitted from inputs and feedback provided by several Units of DG INTPA, as well as from the Knowledge Hub on Health, Socio-Economic Inequalities and Social Protection (HISP).

DG INTPA's assistance, together with the support of the HISP team, was also vital for the editing and publishing of the document

This document should not be considered as representative of the European Commission's Directorate-General for International Partnerships (DG INTPA)'s official position.

Cover photo credit: ec.europa.eu - Yoko, Benin.

Reducing Inequality through Global Gateway

A Strategic Role for the Private Sector

Abstract

The private sector's impact on reducing inequality is neither inherently positive nor negative; rather, its effects are shaped by the broader institutional and policy environment. This report explores the two-way relationship between private sector engagement and inequality reduction, showing that when appropriate conditions are in place, private sector development can serve as a powerful driver of inclusive growth and economic resilience.

Drawing on empirical evidence and case studies, the analysis focuses on the five strategic pillars of the European Commission's Global Gateway—digital, energy/climate, transport, health, and education/research—to identify the key factors that enable private initiatives to benefit disadvantaged populations. These include strong governance systems, equitable regulatory frameworks, inclusive public–private partnerships, and targeted financial instruments.

The report also highlights the role of deeper socioeconomic and institutional dynamics in mediating these outcomes. Ultimately, Global Gateway should make inequality reduction an explicit objective of its strategy—aligning public and private efforts towards the achievement of shared and sustainable prosperity.

Photo credit: ec.europa.eu - Yoko, Benin.

Table of contents

Abbreviations 7

1. Introduction **8**

2. Reciprocal relationship between inequality and private sector development **10**

2.1 Positive pathways between inequality and private sector growth 11

2.2. Negative pathways between private sector growth and inequality 12

2.3. Virtuous or vicious cycles? 13

3. Private sector engagement in the Global Gateway sectors: pathways to reducing inequalities **14**

3.1. Digital 14

3.2. Energy and climate change 22

3.3. Transport 30

3.4. Health 37

3.5. Education 43

4. The role of socioeconomic and institutional factors **52**

4.1. Social factors enabling private sector-driven inequality reduction 52

4.2. Influence of specific horizontal inequalities on private sector contributions 53

4.3. Economic factors 54

4.4. Political and institutional factors 55

5. Conclusion **56**

References **57**

Photo credit: ec.europa.eu – Cotonou, Benin.

Abbreviations

AMP	*Acciona Microenergia Peru*
ANDE	Aspen Network of Development Entrepreneurs
BCTI	Business Commission to Tackle Inequality
BRT	Bus rapid transit
DFID	UK Department for International Development
DFTZ	Digital Free Trade Zone
ESG	Environmental, social, and governance
EU	European Union
GDP	Gross domestic product
IDB	Inter-American Development Bank
IEA	International Energy Agency
IFC	International Finance Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
INEE	Inter-agency Network for Education in Emergencies
IRENA	International Renewable Energy Agency
ITU	International Telecommunication Union
JCF	*Jóvenes Construyendo el Futuro* (Youth Building the Future Programme)
JICA	Japan International Cooperation Agency
MDEC	Malaysian Digital Economy Corporation
MRT	Mass rapid transit
MSC	Multimedia Super Corridor
OECD	Organisation for Economic Co-operation and Development
PAYG	Pay-as-you-go
PMJAY	*Pradhan Mantri Jan Arogya Yojana*
PPP	Public–private partnership
SHS	Solar home system
SMEs	Small and medium-sized enterprises
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund

1. Introduction

Global inequality has emerged as one of the most pressing challenges for sustainable development across its three dimensions: economic, social, and environmental. There have been significant global economic gains in recent decades, but the benefits of these gains have been unevenly shared. Although global income inequality has declined over the last two decades, primarily driven by reduced disparities between countries, within-country inequality has generally increased (Kanbur et al., 2024; Lakner & Milanovic, 2016; World Bank, 2016a; UNDP, 2013). Today, the top 10 percent of the world's population holds more than half of global income, while the poorest half holds less than 10 percent. Wealth disparities are even more pronounced, with the richest 10 percent accruing nearly three-quarters of global household wealth, compared to only 2 percent owned by the poorest half (Chancel et al., 2022)[1]. Simultaneously, more than 690 million people (8.5 percent of the world population) remain in extreme poverty, living on less than $2.15 per day (World Bank, 2024)[2].

Inequalities are not isolated, but cumulative and mutually reinforcing. They manifest across multiple, intersecting dimensions, including income, gender, geography, ethnicity, and age. Persistent inequality can erode trust in institutions, fuel social unrest, and constrain economic growth (The Business Commission to Tackle Inequality, 2023). They also significantly undermine progress towards the United Nations 2030 Agenda, under which reducing inequality is explicitly recognised as a prerequisite for achieving the Sustainable Development Goals (SDGs)—particularly the eradication of poverty (Lakner et al., 2014)[3]. Addressing inequality is thus central to policymakers' and international organisations' strategies for advancing human development.

In this context, the private sector plays a pivotal yet complex role. As the primary engine of growth and job creation, generating approximately 90 percent of employment in developing countries (International Finance Corporation (IFC), 2013) and around 60 percent of gross domestic product (GDP) in several emerging economies (International Monetary Fund (IMF), 2013), **a vibrant private sector is essential for both poverty and inequality reduction**.

Private sector activities can influence inequality **directly**, by creating decent jobs and leveraging wages, or **indirectly**, by reducing disparities in access to and quality of basic services such as education, health, energy, digital and transport services. These indirect pathways typically lead to broader desired intermediate outcomes: improved human capital coming from education and health investments; expanded economic opportunities via better digital connectivity, energy access, and transport infrastructure; and equitable access to all these services, which contributes to reduced spatial inequalities. Crucially, these mechanisms operate within—and are contingent upon—enabling conditions. Effective governance, robust regulatory oversight, well-structured public–private partnerships (PPPs), and policies that incentivise inclusive business practices can all play a vital role in amplifying the private sector's contribution to inequality reduction.

This is where Global Gateway is playing a transformative role. As the European Union's (EU's) flagship international investment strategy, Global Gateway seeks to create smart, clean, and secure links in strategic sectors such as digital, energy, transport, health, and education. Beyond promoting large-scale infrastructure investments, it introduces a holistic 360-degree approach. This approach combines hard and soft investments with enabling reforms—regulatory alignment, skills development, access to finance, and institutional capacity-building—to ensure that partner countries can achieve sustainable and inclusive growth.

Inequality reduction must be at the core of Global Gateway: it must be its lifeblood and moral compass. Just as a healthy body relies on a strong and steady heartbeat, Global Gateway can only thrive if equity pulses through every investment and policy decision. Global Gateway's six guiding principles (equal partnerships, democratic values, transparency, green and clean, security-focused, and private sector mobilisation) create an entry point for embedding equity and inclusion into all investments. By strategically leveraging this 360-degree model, the EU can better ensure that private sector engagement contributes to fairer outcomes and that inequality is not inadvertently increased by investment flows.

1 Wealth here refers to net household wealth, defined as the sum of financial assets (such as equity or bonds) and non-financial assets (such as land and housing) owned by individuals, net of their debts.

2 At a standard of $6.85 per person per day, which is more relevant for upper middle-income countries, 44 percent of the world's population lives in poverty (World Bank, 2024).

3 See also European Commission: 'Reducing inequalities is essential to ensure sustainable development benefits all, especially those furthest behind'.

The following analysis explores how this can be achieved and **how to harness private sector dynamism to ensure the implementation of Global Gateway is inclusive**. It focuses on the reciprocal relationship between inequality and private sector development across the five key Global Gateway sectors, identifying enabling conditions and entry points for action. Specifically, this document addresses the following key questions:

- How does the reciprocal relationship between inequality reduction and private sector engagement operate, and under what conditions can they positively reinforce each other?
- How can private sector initiatives effectively reduce inequalities in the specific sectors prioritised by Global Gateway, and what enabling conditions support inclusiveness?
- What socioeconomic and institutional factors (such as education, health, social protection, gender equity, and governance) mediate and facilitate the positive interaction between inequality reduction and private sector development?

To address these questions, this analysis employs comprehensive desk research and literature review methodologies, drawing on scholarly sources, reports from international organisations, and qualitative and quantitative evidence. The geographic focus is primarily on Latin America, Sub-Saharan Africa, and South-East Asia: these diverse contexts offer practical insights for Global Gateway.

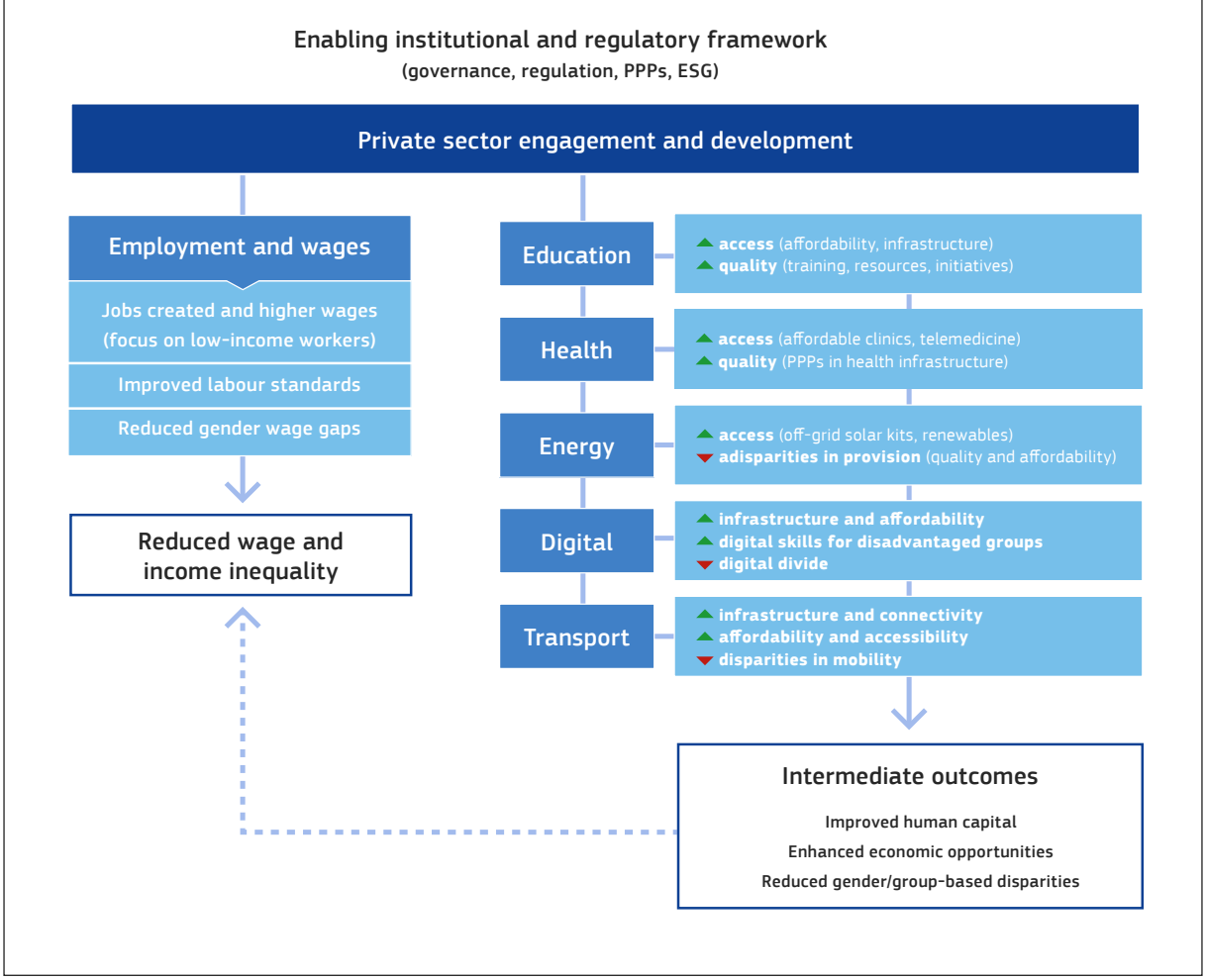
2. Reciprocal relationship between inequality and private sector development

The relationship between inequality and private sector development is multifaceted and context dependent. Private sector activities can reduce disparities by creating decent jobs, providing essential goods and services, and stimulating inclusive economic growth. Under certain conditions, they can also deepen exclusion by reinforcing labour market segmentation, gender gaps, or spatial disparities across urban and rural regions.

Global Gateway's 360-degree approach offers a critical foundation for leveraging private sector engagement to achieve inclusive outcomes. It does this by explicitly linking infrastructure investment to broader enabling reforms—including environmental, social and governance (ESG) compliance, institutional capacity building, and financial inclusion—which are essential for mitigating inequality. Through its six guiding principles, Global Gateway sets a new standard for aligning investment with equity.

Figure 1 (below) outlines the dual pathways: **direct mechanisms** (e.g., employment creation) and **indirect mechanisms** (e.g., improved access to services) through which private initiatives influence inequality.

Figure 1: Analytical framework: channels linking private sector engagement to inequality reduction



Source: Own elaboration. Notes: Solid arrows represent direct pathways; dashed arrows indicate indirect channels; dotted surrounding box indicates critical enabling conditions.

2.1 Positive pathways between inequality and private sector growth

The private sector can significantly influence inequality, positively and negatively, through mechanisms such as job creation, provision of essential goods and services, innovation, and inclusive business models.

Positive impacts primarily occur through **employment generation**. When decent jobs are accessible to poorer groups, incomes at the lower end of the distribution rise, thus reducing inequality. Labour-intensive industries and small and medium-sized enterprises (SMEs), accounting for approximately 90 percent of global businesses and over 50 percent of employment, are particularly effective in providing jobs for less skilled workers and narrowing wage disparities[4]. Furthermore, large firms stimulate employment through the multiplier effect, wherein initial job creation fosters additional employment via supply chains and ancillary services. Such employment gains have been strongly linked with poverty alleviation and improved income distribution (World Bank, 2013). For instance, a 1 percent increase in the private sector employment ratio is associated with a 0.263 percent reduction in income inequality (Van Le & Tran, 2022).

Beyond job creation, **private sector development can reduce inequality by delivering essential goods and services**, sometimes unavailable or inaccessible through public provision, at affordable prices for poorer communities, effectively raising real household incomes and enabling better participation in economic life. Indeed, private sector growth can facilitate better health outcomes through expanded access and improved healthcare coverage, improve infrastructure and public services (e.g., parks, roads, electricity, sanitation, clean water, internet access), and enhance environmental efficiency, both directly and indirectly (e.g., by raising government budgets via taxation) (Bocken et al., 2014; Buhmann et al., 2019; Rashed & Shah, 2021). In particular, social enterprises that explicitly pursue social impacts alongside financial sustainability can, when the state is absent, effectively address inequalities in essential services such as health and education (Angeli & Jaiswal, 2016; Lokman & Chahine, 2021; Santos, 2012). Salud Digna, which operates over 200 clinics that provide affordable diagnostic and clinical services in Mexico and Central America, exemplifies the role of social enterprises in improving healthcare access for underserved populations[5]. Such enterprises increasingly attract impact investors and development finance institutions, which, if combined with robust governance frameworks and clear social performance metrics, can scale their pro-equity impacts while mitigating pressures to prioritise financial returns over social objectives.[6]

Digital innovation by private firms, such as telecom and mobile money services, have also proven transformative in reducing inequalities by enhancing digital skills, financial inclusion, and agricultural productivity in poorer communities (GSMA, 2023).[7] For instance, expansion of mobile broadband coverage in Sub-Saharan Africa increased household consumption by 7–14 percent in Nigeria, Senegal, and Tanzania, mainly through improved labour force participation and financial inclusion among low-income communities (Bahia et al., 2024; Bahia et al., 2023; Masaki et al., 2020). In turn, greater financial inclusion supports small business creation, encourages labour market engagement, and stimulates aggregate demand (Demirgüç-Kunt et al., 2017). Another illustrative case is Banco Azteca's rapid expansion in Mexico (with numerous new branches opened simultaneously in lower-income areas), which increased informal business ownership by 7.6 percent, reduced unemployment by 1.4 percent, and boosted local GDP per capita growth (Bruhn & Love, 2014)[8].

Additionally, **inclusive business models** that intentionally integrate disadvantaged communities into commercial value chains, either as consumers of affordable goods or as income-generating participants, such as producers and distributors, can create mutually beneficial economic opportunities (Schouten & Faling, 2022; Seelos & Mair, 2005). An important example is micro-franchising, which facilitates self-employment by

4 SMEs generate about seven out of 10 formal jobs across developing countries. World Bank: 'Small and Medium Enterprises (SMEs) Finance. Improving SMEs' access to finance and finding innovative solutions to unlock sources of capital'.

5 See, for instance, a study case of Salud Digna in Grossman and Garcia-Cuellar (2011).

6 An example of an impact investor is the Philips Foundation Impact Investments B.V. In regard to development finance institutions, the European Investment Bank has launched the Global Gateway Fund (GLGF): this is a flagship initiative supporting high-impact equity operations that are explicitly aligned with the EU's Global Gateway strategy for inclusive development. See also the Inter-American Development Bank web story: Mexico's Salud Digna: Preventive Care at Affordable Prices.

7 More generally, technological innovation through private sector research and development can significantly boost productivity and foster new industries, potentially reducing inequalities. However, these benefits critically depend on complementary public investments in skills training and workforce development to ensure technological progress is inclusive and benefits workers at all skill levels. Without proactive policy measures, rapid technological advances risk disproportionately favouring higher-skilled workers, exacerbating inequality (Aghion et al., 2019).

8 As at 2023, Banco Azteca operated over 2,000 branches across Mexico, making it the bank with the highest number of branches in the country. The sudden expansion occurred within the existing stores of the major retailer Grupo Elektra, which target low- and middle-income clients, thus leveraging Elektra's customer data, infrastructure, and collection systems, effectively reaching previously unbanked individuals.

providing entrepreneurial support and disseminating technology at the grassroots level (Kistruck et al., 2011), as demonstrated by Kenya's micro-franchising healthcare model.[9] Other examples include contract farming arrangements that provide inputs, training, and stable markets, which increase smallholder farmers' earnings and reduce rural inequality and volatility (Bellemare & Lim, 2018; Minot & Sawyer, 2016).[10] Other initiatives, like Hindustan Unilever's Project Shakti, empower rural women economically while enhancing local markets and promoting gender equality[11] (Scott et al., 2012; Vachani & Smith, 2008; Neath & Sharma, 2008; Kantar Public, 2023). **Cooperatives and community-based enterprises** can also empower small-scale producers by aggregating resources, enhancing market bargaining power, and enabling better access to inputs and technology. Particularly in agriculture, cooperatives can reduce poverty and inequality while supporting sustainable growth (Bernard & Spielman, 2009; Bijman et al., 2016; Food and Agriculture Organization of the United Nations (FAO), 2022). Colombian farmer cooperatives exemplify successful integration of smallholders into profitable supply chains.[12]

As part of inclusive business models, **responsible investment and corporate practices**—including living wages, diversity in hiring, employee training, and profit-sharing schemes—can directly address inequalities by facilitating wage mobility and distributing economic gains more equitably (Dearden et al., 2006; International Labour Organization (ILO), 2022; Kruse, 2016; McKinsey & Company, 2020)[13]. Corporate social responsibility (CSR) initiatives further align private interests with social equity goals (Porter & Kramer, 2011). Examples include Engro Corporation's vocational training and healthcare programmes in Pakistan, and Unilever's Sustainable Living Plan, which integrates health, hygiene, and livelihood improvements for low-income populations into Unilever's business operations[14].

2.2. Negative pathways between private sector growth and inequality

On the negative side, private sector growth can exacerbate inequality if gains disproportionately benefit capital owners, those with established market access, or high-skilled workers. Outsourcing and the gig economy often generate low-paid, insecure employment, increasing inequalities (The Business Commission to Tackle Inequality, 2023). Privatisation without adequate safeguards, especially in health and education, has often resulted in less access to essential services for lower-income groups, deepening divides. For example, the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2021) documents that insufficient regulatory enforcement in relation to private education providers compromises educational quality and widens disparities between rich and poor.

Private sector growth can also deepen inequalities when powerful corporate actors disproportionately shape public policies, regulations, and legislation to their advantage. Such *regulatory capture* can lead to preferential treatment like tax breaks, weak labour standards, or limited accountability, widening disparities (Carpenter & Moss, 2013). Large firms, especially in resource-rich or strategically critical sectors, often exert lobbying pressures to secure outcomes that are favourable to them, potentially at the expense of equitable growth goals and broader societal interests (Organisation for Economic Co-operation and Development (OECD), 2017a). Additionally, in the absence of adequate oversight and robust accountability mechanisms, PPPs can be vulnerable to capture. For instance, in healthcare, poorly regulated private expansion has increased out-of-pocket expenses, disproportionately burdening poorer households: as evidenced in India's private hospital sector under the Pradhan Mantri Jan Arogya Yojana (PMJAY), where limited regulatory controls sometimes failed to adequately protect vulnerable populations from high medical costs (Garg et al., 2024). Effective participatory regulation and strong transparency and accountability measures are essential to mitigate these

9 Child and Family Wellness Clinics in Kenya operate as micro-franchises, empowering local healthcare entrepreneurs (most of whom are women) to deliver affordable medicines and basic health services in underserved communities. See the Health Store Foundation for additional details.

10 Some organisations like One Acre Fund or Selina Wamucii have implemented such arrangements. The former supplies smallholder farmers across nine countries in Africa with asset-based financing and agriculture training services; the latter directly connects smallholder farmers to markets through a mobile platform.

11 Project Shakti enables rural women to achieve financial independence by providing them with fast-moving consumer goods products at a discounted price, which they then sell directly to consumers in their communities Additionally, direct bank transfers help them enter the formal banking sector, fostering financial inclusion.

12 Examples are Cooperativa del Sur del Cauca (COSURCA) and Federación Campesina del Cauca (FCC).

13 Paying living wages not only enhances workers' well-being but also stimulates economic activity. Recent estimates show that it could add up to $4.56 trillion per year to global GDP through increased productivity and consumer spending (The Business Commission to Tackle Inequality, 2023).

14 For further details, see Unilever's Sustainable Living Plan and Engro Foundation.

risks (World Bank, 2017a). Robust oversight and inclusive governance frameworks can help ensure that private sector growth genuinely contributes to equitable outcomes, rather than perpetuating disparities.

The impact of private sector development on inequality reduction is not only ambiguous, it is also reciprocal.

High inequality adversely affects private sector growth through diminished consumer demand, lower human capital investment, and heightened social instability. Firstly, **unequal societies typically exhibit limited market size, as lower-income households—with higher marginal consumption propensities[15]—have less purchasing power** (Almeida, 2016). Conversely, reducing inequality expands consumer markets, stimulating business activity and economic growth. Empirical evidence suggests that income gains for lower-income groups more effectively boost GDP growth than gains concentrated at the top. Specifically, a 1 percentage point increase in the income share of the bottom 40 percent raises GDP growth by 0.32–0.38 percentage points, whereas a similar increase for the top 20 percent reduces growth by 0.08 points (Dabla-Norris et al., 2015).[16]

Extreme inequality also distorts financial markets, often inflating asset bubbles or causing unsustainable debt-driven consumption among poorer households, increasing macroeconomic vulnerability (Kumhof et al., 2015; Mian et al., 2021; Rajan, 2010). By contrast, equitable income distribution stabilises economic growth by promoting balanced consumption and productive investment (Ostry et al., 2014).

Moreover, **high inequality negatively impacts workforce productivity, primarily due to inadequate human capital investments.** Unequal access to quality education, healthcare, and nutrition generates a less skilled and unhealthy workforce, constraining the available talent pool for businesses. This reduces long-term productivity, innovation, and growth potential (Galor & Zeira, 1993; Hanushek & Woessmann, 2012; Bloom & Canning, 2000; Topuz, 2022). Conversely, more equitable societies benefit from a more skilled and productive workforce, improving economic outcomes and reducing operational costs linked to poor health, such as absenteeism (Linnan, 2010; Sears et al., 2013).

Finally, **high inequality also fuels social and political instability, undermining investor confidence and private sector development through increased uncertainty and high operational costs** (linked to supply chain disruptions and the costs of risk management), ultimately limiting long-term economic growth (Alesina & Perotti, 1996; Alesina et al., 1996; Brunetti & Weder, 1998; Busse & Hefeker, 2007; Christopher & Peck, 2004; Julio & Yook, 2012;). Empirical evidence also links severe inequality with higher crime rates (Fajnzylber et al., 2002; Kelly, 2000) and the potential for violent conflict (Cederman et al., 2011; Østby, 2008), further destabilising economic environments. Conversely, reducing inequality fosters social stability and cohesion, enabling longer-lasting periods of economic growth (Yap, 2014).

2.3. Virtuous or vicious cycles?

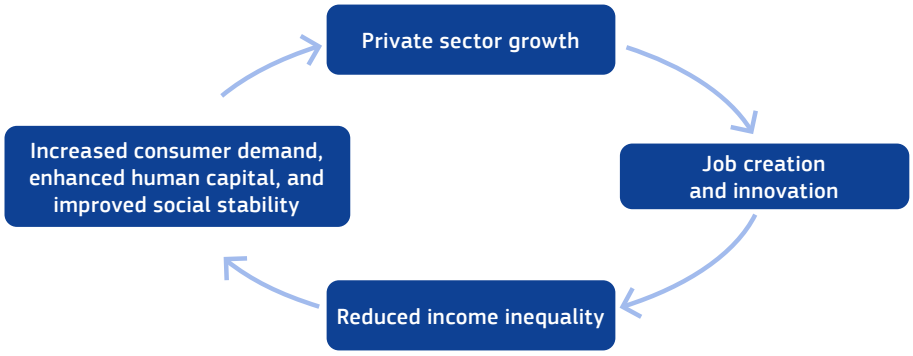
These dynamics form cyclical feedback loops, reinforcing either positive ('virtuous') or negative ('vicious') cycles.

In a virtuous cycle, inclusive private sector growth reduces inequality, expands markets, and stimulates further business investment and productivity, with job creation and wage improvements among lower-income individuals acting as crucial mechanisms in this regard (*Figure 2*). In turn, income growth among lower- and middle-income households can create robust consumer markets, such as for durable goods (electronics) and services (tourism), and this increased demand stimulates innovation and domestic consumption expansion (Kharas, 2017). Latin America's experiences in the 2000s illustrate such virtuous cycles, as private sector-driven job creation during the commodity boom and inclusive policies raised the incomes of low-income populations and significantly reduced inequality (Lopez-Calva & Lustig, 2010; Gasparini et al., 2011).

15 Meaning they spend a larger portion of any additional income on basic needs.

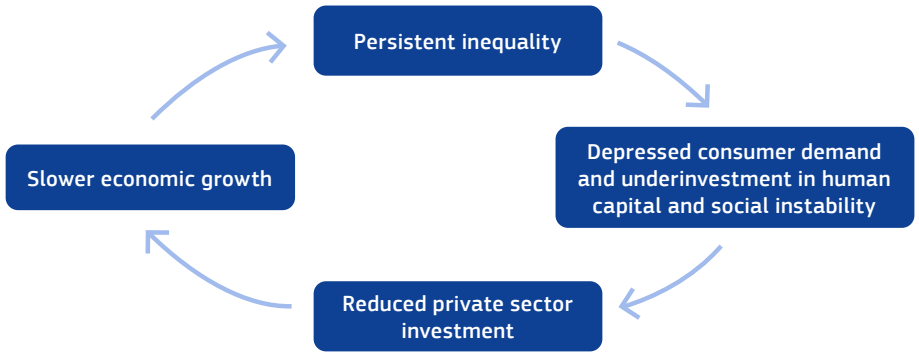
16 This aligns with findings from Berg et al. (2018) and Berg and Ostry (2017), who demonstrate that countries experiencing higher inequality exhibit slower and less sustainable growth.

Figure 2: Virtuous circle of inclusive private sector growth reinforcing economic development and inequality reduction



Conversely, persistent inequality forms vicious cycles, where constrained consumer demand, weakened human capital, and social instability impede sustained private sector growth (*Figure 3*). South Africa post-apartheid experience exemplifies this negative cycle, with persistent inequalities limiting job creation and perpetuating economic exclusion at the bottom, undermining long-term prosperity (World Bank, 2018a; Leibbrandt et al., 2018).

Figure 3: Vicious cycle where persistent inequality hampers private sector growth, further reinforcing inequality



Ultimately, whether private sector development contributes to a virtuous or a vicious cycle depends on the broader enabling environment: it is not inherently beneficial or detrimental to inequality reduction; instead, its effects are mediated by factors such as macroeconomic conditions and institutional quality (see Section 4). In adverse settings, it may exacerbate exclusion and entrench negative cycles. In supportive contexts, however, the private sector can act as a powerful engine for reducing inequality and reinforcing positive feedback loops.

Fostering inclusive private sector development and effective inequality reduction therefore requires a combination of targeted interventions and supportive conditions. However, such conditions do not manifest uniformly across all contexts or sectors. Rather than analysing these general enabling factors in the abstract, the following section adopts a sectoral lens. It examines, through specific case studies, how private sector engagement in each of the EU's Global Gateway priority areas—digital, energy, transport, health, and education—can contribute to reducing inequalities, and under which specific conditions this contribution becomes possible.

3. Private sector engagement in the Global Gateway sectors: pathways to reducing inequalities

Large-scale infrastructure and service investments through private sector engagement in the EU's Global Gateway priority sectors—digital, energy, transport, health, and education—hold significant potential for reducing inequalities by enhancing access to, and affordability of, products and services for disadvantaged groups (Global Infrastructure Hub, 2020).[17]

Without a 360-degree approach, private activities in these sectors can also exacerbate exclusion or deepen existing disparities. Importantly, the 360-degree approach calls for sector-specific and context-sensitive solutions for reducing inequality. In digital transformation, for example, investments must be paired with digital literacy and gender-inclusive access strategies. In health and education, equitable pricing models and public accountability are crucial. In transport and energy, rural connectivity and community co-ownership mechanisms are key to inclusive impact. **These components are not ancillary to, but in fact are core to, the transformative vision and comparative advantage of Global Gateway.**

This section identifies essential elements that the 360-degree approach should take into consideration to maximise inclusive outcomes, highlighting where complementary action is critical to mitigate potential risks of increasing inequalities.

3.1. Digital

Significant digital divides persist. Approximately one-third of the world's population remains offline, with stark disparities between high-income countries (93 percent online) and low-income countries (27 percent online), and marked gaps within countries by geography, income, and gender (International Telecommunication Union (ITU), 2024a). For example, the rate of internet usage is around two-thirds of the population in Brazil and Mexico, approximately one-third in India, and less than 25 percent in Sub-Saharan Africa (García-Escribano, 2020). Such disparities severely limit access to education, employment, and economic opportunities for disconnected populations, a fact that was starkly highlighted during the COVID-19 pandemic. With the rapid pace of global digitalisation, the competitive landscape for firms has also become increasingly intense. SMEs in partner countries are particularly vulnerable to losing competitiveness if they fail to adapt and harness digital opportunities. In the absence of complementary digital literacy efforts, the benefits of digitalisation may disproportionately accrue to large, well-resourced firms and highly educated individuals, risking a further deepening of existing inequalities (Unwin, 2019; García-Escribano, 2020).

Investing in the digital sector, notably telecommunications, internet connectivity, digital services and artificial intelligence, and with a focus on SMEs, has the potential to reduce this digital divide. Expanding digital access can significantly reduce inequalities, by democratising access to information, providing disadvantaged groups with access to education, health, and employment services (e.g., online freelancing, e-commerce), and government services (such as digital payments for social assistance), and by narrowing urban–rural gaps (Fang et al., 2023; Graves et al., 2021; Hage et al., 2013; Salemink et al., 2017). Evidence shows that increased internet access correlates positively with economic growth and reduced inequality of opportunity. Private telecom and tech companies are central to this digital expansion, as they can extend mobile networks into remote areas. As discussed in Section 2, empirical evidence from Africa indicates that mobile broadband access significantly increased household consumption (by 7–14 percent) through improved employment opportunities and financial inclusion (Bahia et al., 2024; Bahia et al., 2023; Masaki et al., 2020). For detailed cases, see Box 3.1.A (M-Pesa) and Box 3.1.B (M-Kopa Solar). In addition, the adoption of digital technologies also helps companies, especially SMEs, to improve their efficiency, competitiveness, and sustainability, thereby contributing to a more inclusive and circular economy.

17 European Commission, 'Global Gateway: up to €300 billion for the European Union's strategy to boost sustainable links around the world'.

Box 3.1.A. Case study: M-Pesa (Kenya)

Launched in Kenya in 2007[18], M-Pesa is a mobile-based money transfer and microfinancing service initiated by Vodafone UK and Safaricom, Kenya's largest telecommunications provider. The name combines 'M' for mobile and 'Pesa', the Swahili word for money. M-Pesa enables users to manage their money, pay for goods and services, send remittances, pay bills, access loans, and maintain savings accounts—all through mobile phones. Leveraging Safaricom's extensive network, transactions are facilitated via SMS, with funds stored securely in virtual accounts linked to users' mobile numbers.

M-Pesa significantly reduces financial inequalities by enhancing financial inclusion, expanding access to secure banking services, and supporting economic development among marginalised populations. The service has reached millions of users, especially in rural areas, where formal banking services are limited. As at the fourth quarter of 2024, M-Pesa's market share in the mobile money sector reached 91 percent, covering over 34 million users.

A major disparity addressed by M-Pesa is limited access to traditional banking, particularly in rural regions. Previously, many Kenyans depended on informal, unreliable financial mechanisms. M-Pesa provides an accessible and secure alternative, enabling individuals to conduct transactions, save money, and access credit without needing physical bank branches. This has increased economic stability and consumption, through enabling reliable financial transactions.

Access to M-Pesa has been associated with lifting approximately 194,000 Kenyan households (around 2 percent of the total) out of extreme poverty. The impact has been particularly significant for female-headed households, among whom the poverty rate has declined from 43.3 percent to 34.1 percent. M-Pesa has empowered women, who typically experience higher levels of financial exclusion. Over 60 percent of M-Pesa users are women. M-Pesa grants women greater control over finances, facilitating their entrepreneurship and their ability to manage household expenses, and improving overall family welfare. Importantly, the availability of M-Pesa has encouraged approximately 185,000 women to transition from farming to business occupations.

Additionally, M-Pesa benefits small businesses and informal traders by replacing cash transactions, which were previously vulnerable to theft and mismanagement, with secure digital payments. It also offers microloans through partnerships with financial institutions like the Commercial Bank of Africa, fostering small business growth. The rapid proliferation of M-Pesa agents ensures that these benefits extend to remote populations.

Finally, the platform facilitates domestic and international remittances, enhancing household financial security. Many Kenyans working in urban centres or abroad use M-Pesa to send money home, supplementing family incomes and enabling sustained access to essential services.

Several **enabling conditions** have been instrumental in M-Pesa's success in reducing financial inequalities, notably the following:

1. Regulatory flexibility was crucial, as the Central Bank of Kenya adopted a supportive, adaptive approach, rather than applying traditional, rigid frameworks. Specifically, instead of immediately imposing strict banking regulations, the bank allowed Safaricom to pilot M-Pesa under a special letter of no objection, closely monitoring its operations while progressively refining regulatory oversight. This adaptive stance—termed a 'test and learn' approach—enabled M-Pesa to innovate and expand quickly to meet consumer needs without being prematurely constrained by standard banking regulations, which typically demand full compliance prior to market entry.
2. Strong collaboration between public and private actors further supported M-Pesa's growth. Safaricom partnered closely with government agencies, international organisations (such as the UK's Department for International Development (DFID)), and financial institutions to implement M-Pesa. The initiative gained prominence following the 2003 World Summit for Sustainable Development, where it was first proposed (M-Pesa aligns closely with the global poverty reduction objectives under the Millennium Development Goals). This international recognition facilitated funding, access to technical expertise, and strategic partnerships that were essential for M-Pesa's development.

18 M-Pesa, launched in 2007 in Kenya, has since expanded to Tanzania, Mozambique, Democratic Republic of Congo, Lesotho, Ghana, and Egypt.

3. Finally, Kenya's market conditions provided a conducive environment for mobile banking innovation. Given the significant portion of the population without traditional banking access, there was strong demand for alternative financial solutions, directly contributing to M-Pesa's rapid adoption.

In conclusion, M-Pesa has transformed Kenya's financial sector by extending banking services to previously unbanked populations, empowering women economically, strengthening small businesses, and driving broad-based economic growth. Its multidimensional impact provides valuable lessons for other countries aiming to enhance financial inclusion.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Enhanced financial inclusion (direct).
- Gender empowerment and reduced gender disparities (direct and indirect).
- Strengthened economic stability and consumption growth (indirect).
- Improved household financial security via remittances (indirect).

ENABLING CONDITIONS:

- Supportive and flexible regulatory framework.
- Strategic public–private and international partnerships.
- Favourable market dynamics.

Sources: Based on Jack and Suri (2011), Kingiri and Fu (2019), Mas Ribo and Radcliffe (2010), Ndung'u (2021), Rouse at al. (2023), Sungi et al. (2022), Suri and Jack (2016), and Fintech Magazine Africa.

While M-Pesa demonstrates how digital innovation can directly reduce financial exclusion and empower marginalised populations, **the impact of digitalisation on inequality extends beyond financial services.** Case study 3.1.B further illustrates how digital technologies, when paired with inclusive business models, can facilitate access to essential services such as electricity, which is a critical driver of socioeconomic inclusion. Complementary public infrastructure, especially reliable electricity, is also crucial to enable last-mile connectivity, which depends on the availability of power (García-Escribano, 2020).

Box 3.1.B. Case study: M-Kopa (Kenya/East Africa)

M-Kopa is a Kenyan-based social enterprise founded in 2011 to provide low-cost, off-grid solar energy solutions to people living in extreme poverty across Sub-Saharan Africa. Operating in collaboration with Kenya's M-Pesa[19], M-Kopa offers affordable solar home systems (SHSs) to rural, low-income, off-grid customers through an **innovative pay-as-you-go (PAYG) financing model.** Each SHS includes a solar panel, LED bulbs, a rechargeable radio, a flashlight, and mobile phone charging adapters.

Customers pay a small initial down payment for the SHS, followed by affordable monthly instalments paid via M-Pesa. Payments are managed through a SIM card embedded in each solar unit, enabling M-Kopa to track transactions digitally, thus significantly reducing administrative costs and eliminating the need for loan officers. If customers miss payments, M-Kopa is automatically notified and can remotely send reminders or temporarily disable the solar system until payments resume, ensuring financial sustainability and operational efficiency. As at 2023, M-Kopa had connected over 1 million homes in East Africa to clean energy, highlighting the transformative potential of decentralised solar solutions to improve economic outcomes, household health, and environmental sustainability.

M-Kopa's intervention addresses multiple dimensions of inequality: energy access, financial inclusion, health improvement, and educational opportunities. Approximately 600 million people in Sub-Saharan Africa lack reliable electricity access, and M-Kopa directly addresses this through its scalable PAYG model.

19 See Safaricom: 'Safaricom and M-KOPA unveil kshs.40 a day solar unit'.

By eliminating upfront costs, low-income families gain immediate access to solar energy, simultaneously building credit histories that facilitate future financial inclusion. Transitioning from hazardous energy sources like kerosene lamps reduces health and safety risks, including respiratory issues linked to harmful fumes and the danger of household fires.

Moreover, access to reliable solar lighting allows for extended study hours for children and improved productivity for small businesses, directly fostering local economic growth.

Several **enabling conditions** have contributed to M-Kopa's effectiveness:

1. Technological innovation and a flexible business model have played a critical role: M-Kopa integrates household-level solar technology with mobile-based PAYG financing systems (via M-Pesa), enabling efficient payments that are tailored to the economic realities of low-income households, without the need for physical infrastructure. This also accommodates customers' income volatility, with repayments aligned with household cash flows.
2. Supportive market conditions in Kenya, including a robust mobile money ecosystem and a mature solar energy industry, provide an ideal environment for scaling such solar solutions.
3. Ongoing research and product development has ensured the solutions remain relevant in the face of evolving consumer needs, enhancing adoption and customer retention. Specifically, M-Kopa integrates customer feedback to refine its SHSs and has introduced flexible payment terms and energy-efficient household devices, addressing affordability and lifestyle preferences. These continuous adaptations improve customer satisfaction and long-term usage.
4. Strong governmental support and strategic partnerships with financial institutions, technology providers, and regulatory agencies have facilitated efficient product distribution, financing options, and regulatory compliance, bolstered by national policies that explicitly recognise off-grid solar as essential for achieving universal electricity access.

M-Kopa demonstrates how private sector social enterprises can effectively drive sustainable development by integrating innovative technologies, inclusive financing models, and strategic partnerships. Continued innovation and supportive policy environments will be essential in sustaining and expanding M-Kopa's impact across Sub-Saharan Africa.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Enhanced energy access (direct).
- Improved financial inclusion (direct and indirect).
- Better health outcomes and increased safety (indirect).
- Increased educational and economic opportunities (indirect).

KEY ENABLING CONDITIONS:

- Integration of technological innovation and mobile financing.
- Favourable market conditions.
- Flexible business model aligned with income volatility.
- Supportive government policies and strategic partnerships.

Sources: Based on Heinemann (2022), M-Kopa (2024), Rastogi (2018), and Park (2021).

Unlocking private sector potential in the digital sector, and reconciling social impact with commercial viability, requires the rights incentives. Supportive frameworks like PPPs, universal service funds, and innovative technologies (e.g., satellite internet, or Google's Project Loon, which utilises high-altitude balloons to provide rural internet) can incentivise private investments to bridge connectivity gaps in underserved regions. Regulatory incentives, such as affordable spectrum licensing linked explicitly to rural

coverage, are essential[20]. Digital literacy initiatives through private-NGO-government collaborations, such as community technology hubs for youth and small entrepreneurs and agricultural advisory services via SMS, can further empower marginalised groups, boosting employment, productivity, and incomes.

Malaysia's digital economy initiatives illustrate these enabling conditions, building on effective public–private collaboration for digital inclusion and expanded economic opportunities and digital literacy initiatives (see Box 3.1.C).

Box 3.1.C. Case study: digital economy (Malaysia)

Malaysia's integration of digital technologies into its economy has been significantly accelerated by strong private sector engagement. The country's digital economy has grown markedly over the past two decades; it contributed 22.6 percent of GDP in 2021 and is projected to reach 25.5 percent by 2025. Key government initiatives, such as the establishment of the Malaysian Digital Economy Corporation (MDEC)[21] and the Multimedia Super Corridor (MSC), have fostered digital infrastructure and innovation. The MSC, a technology-driven economic zone inspired by Silicon Valley and covering Kuala Lumpur, Putrajaya, Cyberjaya, and Kuala Lumpur International Airport, has successfully attracted both global and local tech firms. Additionally, the Digital Free Trade Zone (DFTZ), launched in 2017, has significantly boosted cross-border e-commerce, benefiting over 2,500 SMEs.

The expansion of Malaysia's digital economy has directly and indirectly contributed to reducing inequalities across several dimensions. E-government initiatives have increased the accessibility of public services, particularly benefiting rural and underserved populations. Digital innovations, such as telemedicine, have significantly improved healthcare accessibility in underserved areas, further demonstrating the digital economy's role in bridging socioeconomic gaps and fostering inclusive growth. Digital literacy programmes led by the MDEC, such as the Saya Digital movement, and private sector initiatives like the Collective Impact Program (led by Microsoft and local partners Biji-biji Initiative and Mereka) have provided crucial skills training, expanding economic opportunities and social mobility, particularly benefiting youth and underserved populations. Finally, the integration of SMEs into global markets via e-commerce platforms has created equitable growth opportunities by simplifying market access and transactions.

Several **enabling conditions** have supported the rapid expansion of Malaysia's digital economy:

1. Private sector actors have played a critical role by bridging knowledge and expertise gaps, in collaboration with the government, notably in developing robust e-government frameworks and digital infrastructure, and enhancing economic opportunities for SMEs.
2. Regulatory measures, such as the MSC and DFTZ[22], have fostered innovation, attracted foreign investments, encouraged local fintech startups, and stimulated economic activity. Additionally, platforms like the Malaysia Digital Hub provide intellectual property protection and regulatory support, which, coupled with transparent frameworks like the 2023 PPP Code, further attracts substantial private sector participation.
3. Strong PPPs, bolstered by government subsidies and grants specifically targeting digital startups, have further promoted fintech and e-commerce growth. Additional targeted support includes tax incentives for digital investments, accelerated approval procedures for tech businesses, funding schemes for digital skills training, and venture capital financing explicitly dedicated to innovative startups.

20 Affordable spectrum licensing refers to regulatory practices whereby governments allocate spectrum access rights to mobile network operators at reduced costs or under favourable conditions, often in exchange for commitments to expand coverage in underserved rural or low-income areas. By lowering the cost of spectrum acquisition, such policies incentivise operators to invest in infrastructure in commercially less attractive regions, thereby promoting more equitable digital connectivity (GSMA, 2019; World Bank, 2021a).

21 The MDEC is a government agency established in 1996 under the Ministry of Communications and Digital, tasked with accelerating Malaysia's digital economy. It facilitates the development of digital infrastructure, promotes innovation and entrepreneurship, attracts investments, and implements national initiatives, such as the MSC, to position Malaysia as a regional digital hub (MDEC, n.d.a; World Bank, 2018b).

22 The MSC, through its Bill of Guarantees, has offered incentives including tax exemptions, unrestricted employment of foreign knowledge workers, and has assured freedom of internet usage, creating a conducive environment for digital enterprises. The DFTZ has facilitated SME export activities by providing e-fulfilment facilities, has streamlined customs procedures, and has enhanced trade facilitation measures, positioning Malaysia as a regional e-commerce hub.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Improved access to public services (direct and indirect).
- Enhanced digital literacy and expanded economic opportunities (indirect).
- Increased SME market access (indirect).
- Improved healthcare accessibility (indirect).

KEY ENABLING CONDITIONS:

- Robust PPPs and collaboration.
- Proactive government incentives and targeted support (e.g., tax exemptions, grants, streamlined regulatory approvals, venture capital funding).
- Comprehensive regulatory frameworks fostering innovation and investment.
- Extensive digital infrastructure and widespread internet penetration.

Sources: Based on Edrak et al. (2022), ITU DataHub, Kylasapathy et al. (2018), Lexology (2022), Loh et al. (2021), Microsoft (2023), MDEC (n.d.a; n.d.b), and Tham (2018).

The case studies above illustrate how digital innovations can reduce inequalities, when they are supported by appropriate ecosystems. Drawing on these experiences, several key enabling conditions emerge as critical for ensuring that digital development translates into inclusive outcomes.

Key enabling conditions for inclusive investments in the digital sector:

- **Supportive regulation and incentives:** Policies encouraging the expansion of networks into underserved areas (universal service funds, coverage obligations, PPP models), promoting a 'test and learn approach'[23], and involving, via a participatory approach, the most vulnerable, including the elderly and persons with disabilities.
- **Competitive market environment:** Anti-monopoly policies that ensure affordability and widespread digital access.
- **Complementary infrastructure:** Reliable, affordable electricity access, especially in rural and remote regions.

Building on this, Global Gateway's digital pillar should outline concrete principles that will help to structure inclusive, equity-oriented investments. .

Strategic guidance for the Global Gateway's digital pillar, which should accompany investments:

DO'S

- **Promote innovative, scalable, low-cost business models**[24], tailored to economically disadvantaged users, such as innovative PAYG financing models[25].
- **Ensure affordability of digital services:** Flexible data packages, such as PAYG, low-cost bundles tailored for low-income users, and subsidised or zero-rated access to essential online services (e.g., education, healthcare) that accommodate customers' income volatility by aligning repayments with household cash flows. For instance, India's Reliance Jio significantly expanded

23 A 'test and learn' approach is a regulatory or operational strategy that allows innovative solutions to be piloted in a controlled environment before full-scale implementation or formal regulation. Rather than applying strict rules upfront, regulators or institutions monitor the innovation in real time, gather evidence on its performance and risks, and use these insights to iteratively adapt oversight and frameworks. This approach encourages experimentation, supports responsible innovation, and enables adjustments to be made based on practical experience, balancing flexibility with safeguards to protect consumers and ensure systemic stability.

24 Examples include PAYG solar energy models like M-Kopa in East Africa, mobile money platforms such as M-Pesa in Kenya, and low-cost mobile data plans such as Reliance Jio in India. These business models effectively reduce upfront costs and offer affordable pricing structures, facilitating access for lower-income and financially underserved populations.

25 A PAYG financing model allows customers to access products or services, like solar energy, by making small, regular payments over time, instead of paying the full cost upfront. Using mobile money platforms, users can pay in instalments based on their income flow, making essential services affordable and financially manageable for low-income households. A successful example is the Kenyan social enterprise M-Kopa.

affordable mobile data access through aggressive market strategies, including substantial initial investment in infrastructure, offering exceptionally low prices to rapidly capture market share, providing free trial periods, and creating intense price competition that drastically lowered data costs across the sector (Mukherjee, 2019; Parsheera & Trehan, 2020).

- **Develop inclusive and accessible service design:** Locally tailored devices, multilingual content, user-friendly interfaces, accessible for persons with disabilities[26].
- **Invest in digital literacy***:* Partnerships for education and skills training tailored to marginalised populations, including necessary support services and assistive technologies (e.g. screen readers, speech-to-text software, braille displays, hearing aids, and adapted keyboards), to enable the effective participation of elderly individuals and persons with disabilities.
- **Collaborate with governments**, particularly ministries or departments responsible for telecommunications, digital infrastructure, consumer affairs, finance, competition policy, and regulatory agencies, to develop consumer data protection, cybersecurity measures, and affordability frameworks.
- **Involve NGOs**. Private-NGO-government collaborations, such as community technology hubs for youth and small entrepreneurs and agricultural advisory services via SMS, can empower marginalised groups.
- **Embed strong data protection and cybersecurity measures**, including robust legal frameworks for data privacy, clearly defined protocols for data handling, storage, and sharing, regular security audits, user consent mechanisms, and targeted cybersecurity training. These safeguards are essential to protect newly connected and digitally inexperienced populations from potential exploitation, identity theft, or privacy breaches (ITU, 2024b; World Bank, 2021b).

DON'TS

- **Avoid funding or strengthening monopolies** which limit competition and hinder equitable market entry.
- **Do not invest in projects that lack enforceable universal coverage provisions**.
- **Do not underestimate data security** and privacy needs among newly connected users.
- **Do not assume that infrastructure alone guarantees inclusion.** It is essential to proactively address digital literacy gaps across diverse groups (e.g., through tailored training, community outreach, and accessible content) and to avoid deploying standardised solutions without adapting them to local socio-cultural and technological contexts (e.g., via participatory design, local language integration, or context-specific user interfaces).

> *For instance, Facebook's Free Basics initiative faced significant criticism for exacerbating digital inequalities rather than reducing them. The initiative provided selective, limited access to certain websites—primarily corporate services from the US and UK, rather than locally relevant content—failing to meet users' linguistic and informational needs. Furthermore, Free Basics did not offer full internet connectivity but instead restricted access and prioritised Facebook's own services, violating net neutrality principles. Its data collection practices also raised additional privacy concerns, as metadata from all user activities was collected. This experience illustrates that without appropriate oversight, private digital initiatives may reinforce rather than mitigate digital divides (Belli, 2017; AdVox, 2017).*

26 For example, the mobile app Kobo360, a logistics platform operating across Africa, offers user-friendly interfaces in multiple languages, including English, French, Hausa, and Swahili, enabling drivers and small business users from diverse linguistic backgrounds to access essential digital logistics services seamlessly. The platform's multilingual support enhances usability for users with varying levels of digital literacy (see www.kobo360.com and IFC, 2020).

The strategic guidance developed based on the case studies can also be applied to ongoing Global Gateway projects. The list below identifies current initiatives in the digital sector where such principles could help maximise inclusive outcomes.

Digital: selected Global Gateway projects, per region:

AFRICA
Medusa Cable, Africa-Europe Digital Regulators, Data Governance, Satellite Connectivity.

ASIA AND THE PACIFIC
Smart City Connectivity in Nusantara, Digital Transformation.

LATIN AMERICA AND THE CARIBBEAN
BELLA Cable Extension to Central America, EU-LAC Digital Accelerator, Paz Total Connectivity (Colombia), Amazonia Verde Digital Connectivity.

EASTERN NEIGHBOURHOOD
Rebuilding Future and Hope, Black Sea Digital Connectivity (submarine digital cable).

SOUTHERN NEIGHBOURHOOD
MEDUSA Submarine Optical Fibre Cable

WESTERN BALKANS AND TÜRKIYE
WiFi4WB

Source: European Commission, '*Global Gateway flagship projects*'.

In sum, digital technologies offer substantial potential to reduce inequalities by broadening service access, economic inclusion, and educational opportunities. Realising these benefits requires targeted efforts to address digital divides, affordability, infrastructure coverage, digital skills, and regulatory protections. Strategic private sector engagement, aligned with inclusive public policy, is essential for equitable digital development outcomes.

3.2. Energy and climate change

Access to affordable, reliable, and clean energy is a key enabler of private sector development, and a powerful lever for reducing inequalities. Yet energy poverty remains widespread: approximately 685 million people still lack electricity, and around 2.1 billion rely on polluting fuels and inefficient cooking technologies (International Energy Agency et al., 2024). Limited access to modern energy constrains private sector competitiveness. Without reliable electricity, local businesses face higher operating costs, reduced productivity, and limited working hours, especially in rural and peri-urban areas. Energy poverty also weakens the foundations for long-term private sector development by eroding human capital. Traditional cooking fuels cause indoor air pollution, leading to health issues that lower workforce productivity. Poor lighting restricts children's study time and adult learning. Expanding access to clean, affordable energy reverses this cycle. Rural electrification supports income-generating activities (notably for the most vulnerable), boosts agricultural productivity (e.g., solar irrigation), and enables business growth (e.g., in ecotourism). Improved lighting extends the hours available for study and enterprise activities, while energy-efficient appliances and clean cookstoves reduce costs and health risks. In this way, **inclusive energy access is a multiplier for inequality reduction, underpinning both individual opportunity and inclusive market growth.**

Private sector engagement plays a vital role in delivering these outcomes. While energy infrastructure was traditionally a public domain, private actors now contribute significantly across the energy value chain: from grid generation to decentralised off-grid solutions. Independent power producers (IPPs), often operating through PPPs, expand electricity supply and improve service reliability, reducing outages that disproportionately harm small businesses and informal livelihoods. For example, the Ruzizi III Hydropower Project, jointly developed by Rwanda, Burundi, and the Democratic Republic of Congo, aims to provide sustainable electricity to 30 million people, half of whom live below the poverty line[27].

27 Ruzizi III Energy Limited (REL): '*Project Overview*'.

Similarly, Chile's targeted subsidies have incentivised private sector electrification of disadvantaged rural areas, which has brought about almost universal electricity coverage (Phillips et al., 2020).

In parallel, **private innovation has driven off-grid renewable energy solutions that are both affordable and scalable**. Empirical evidence demonstrates that rural electrification boosts household incomes through new economic activities, enhances agricultural productivity through solar irrigation, promotes micro-enterprise growth, and supports better educational and health outcomes (Kooijman-van Dijk & Clancy, 2010; Mejdalani et al., 2018; Negera et al., 2025; Vernet et al. 2019). Companies like d.light provide SHSs using affordable PAYG models, benefiting over 30 million households in more than 70 countries. Similarly, Bboxx reaches approximately 3.6 million people across Africa. Mini-grid initiatives by ENGIE Energy Access benefit around 11 million people across nine African countries (ENGIE, 2023), while WeLight has electrified 30,000 rural households in Madagascar, Mali, and Nigeria. In Bangladesh, the Infrastructure Development Company Limited (IDCOL) facilitated private installations of SHSs, benefiting about 20 million individuals, through microloans (Cabraal et al., 2021). Another example is M-Kopa Solar, which collaborates with M-Pesa in Kenya to offer off-grid solar solutions via mobile-based financing (M-Kopa, 2024) (see Box 3.1.B.).

These solutions are further scaled through **innovative financing models**, including concessional blended finance, output-based subsidies, and 'energy-as-a-service' (EaaS) schemes. Crucially, social enterprises are often at the forefront of reaching last-mile populations. Africa GreenTec, for instance, deploys mobile solar units to underserved communities in Mali, Niger, and Senegal, while the Beyond the Grid Fund for Africa is incentivising firms, through per-connection payments, to reach 1.75 million new users by 2029. Similar approaches in Latin America, such as Acciona Microenergia in Peru, illustrate effective private engagement in rural electrification (see Box 3.2.A) (GOGLA, 2020).

Box 3.2.A. Case study: Acciona Microenergia (Peru)

Acciona Microenergia Peru (AMP), a non-profit association promoted by acciona.org (the cooperation for development foundation of the Acciona company, which manages sustainable infrastructure in renewable energy), has significantly contributed to rural electrification in the Andean region of Peru. Through its Luz en Casa initiative, AMP has provided SHSs to almost 4,000 poor and extremely poor households across 117 communities in the Cajamarca region, which has some of the lowest electrification rates in Peru. As at 2023, AMP's projects prevented approximately 1,986 tons of annual CO2 emissions and generated energy savings of around €162,500 per year in the Cajamarca region. AMP has extended its initiatives to the Peruvian Amazon, supplying electricity to an additional 5,600 households.

AMP adopted an 'energy-as-a-service' (EaaS) model, whereby customers access electricity provided by SHSs, with AMP retaining ownership and responsibility for installation, maintenance, repairs, and equipment replacement[28]. This approach ensures consistent, reliable, and affordable service delivery, enabling even the poorest households to access sustainable electricity without prohibitive upfront costs. Additionally, by managing all technical aspects, AMP alleviates the operational and financial burdens on households, facilitating broader adoption of renewable energy.

AMP's efforts have directly addressed inequalities by tackling energy poverty in some of Peru's most isolated and underserved regions. Reliable solar power has improved household access to lighting, educational opportunities, and economic activities, significantly reducing reliance on costly and polluting energy sources such as diesel generators and kerosene lamps.

Affordability is a core component of AMP's inclusive model. Through a PAYG mechanism, households can make small, incremental prepayments, instead of bearing the burden of a large upfront investment. This flexible financing approach is particularly beneficial for low-income households, helping to reduce monthly energy expenditures, ease financial pressures, and ultimately contribute to reducing income-related inequalities in access to essential services. Additionally, AMP's governance model emphasises community engagement through local Photovoltaic Electrification Committees, empowering residents by involving them in system maintenance, payment collection, and feedback exchanges that lead to system improvements through a community representation mechanism, fostering a sense of ownership and ensuring the sustainability of the electrification projects. This approach also helps bridge knowledge gaps regarding renewable energy technologies within communities.

28 For a comprehensive overview of the EaaS model and its implications for renewable energy deployment, see International Renewable Energy Agency (2020).

Several **enabling conditions** have supported the success of AMP's Luz en Casa projects, including technological innovation, robust community involvement, and comprehensive institutional support:

1. Technological innovation: the second- and third-generation SHSs have proven to be reliable and adaptable to local needs[29].
2. A multi-stakeholder management model involving partnerships with local governments, private entities, and NGOs, which provide essential financial and logistical backing. Notably, collaborations have included partnerships with local authorities in the Cajamarca and Loreto regions, the National Fund for Scientific, Technological and Technological Innovation Development of Peru (FONDECYT), and the Spanish Agency for International Development Cooperation (AECID).
3. The favourable policy environment in Peru, marked by recent governmental emphasis on rural electrification and renewable energy, has further facilitated AMP's impact.

Despite ongoing challenges, such as difficult terrain, limited infrastructure, and financial constraints, AMP's integrated strategy—combining affordable financing mechanisms, adaptable renewable energy technologies, community involvement, multi-stakeholder partnerships, and alignment with national renewable energy policies—demonstrates how sustainable energy initiatives can effectively reduce development disparities, enhance social equity, and support climate action.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Reduced energy poverty across regions by increasing coverage, focusing on remote areas (direct).
- Improved educational and economic opportunities (indirect).
- Decreased reliance on costly, polluting energy sources (indirect).
- Enhanced community empowerment and knowledge (direct and indirect).

ENABLING CONDITIONS:

- Adaptable technological innovation (SHSs), and affordable financing models (EaaS and PAYG) that eliminate upfront costs for low-income households.
- Robust community engagement through local committees.
- Effective multi-stakeholder partnerships and collaboration.
- Supportive national policy framework for renewable energy.

Sources: Based on acciona.org, Del-Río-Carazo et al. (2022), and Lillo et al. (2021).

Another inclusive business model that illustrates the potential of the private sector to address inequalities is Solar Sister in Sub-Saharan Africa. Solar Sister empowers over 11,000 female entrepreneurs to distribute solar lights and clean cookstoves, benefiting more than 4.7 million people (ENERGIA, 2023; Solar Sister, 2024) (see Box 3.2.B). Similarly, Pollinate Group in India and Nepal, and India's Barefoot College, economically empower women through renewable energy entrepreneurship.

29 Acciona Microenergia's second-generation SHSs typically include a photovoltaic panel, a lithium-ion battery, three LED lights, and a mobile phone charger, providing basic lighting and electricity for small electronic devices. The third-generation systems further improve performance and usability by integrating advanced battery storage, higher-capacity solar panels, and the ability to power additional small appliances, as well as enjoying greater durability and a longer lifespan (acciona.org).

Box 3.2.B. Case study: Solar Sister (Africa)

Founded in 2009, Solar Sister is a women-led social enterprise that is addressing the intersection of clean energy access, rural inaccessibility, and women's economic empowerment in Sub-Saharan Africa. The enterprise educates local women entrepreneurs and employs them to distribute clean energy products—such as solar lights, mobile chargers, and efficient cookstoves—in underserved rural areas. Utilising a last-mile distribution model, Solar Sister integrates these female entrepreneurs into the clean energy supply chain, fostering local leadership, economic growth, and environmental sustainability[30]. Currently operating in Uganda, Tanzania, and Nigeria, the enterprise simultaneously expands energy access and advances gender equality.

Solar Sister contributes to reducing inequalities by directly empowering women, boosting household incomes, addressing educational gaps related to clean energy technologies, and increasing rural access to renewable energy sources. In many rural off-grid communities, women traditionally encounter systemic barriers to financial independence and rely heavily on hazardous and costly energy sources, such as kerosene. Transitioning from kerosene to solar-powered lighting reduces household expenses, minimises exposure to harmful fumes, and mitigates fire hazards. Entrepreneurs affiliated with Solar Sister not only improve their own livelihoods but also facilitate broader community adoption of clean energy. Further, improved lighting extends study hours for children and operational hours for local businesses, promoting educational and economic advancement. From a gender perspective, these activities have the potential to increase women's decision-making power, economic self-sufficiency, and social mobility.

Several **enabling conditions** underpin Solar Sister's success:

1. The effective use of community networks for last-mile distribution: Solar Sister's community networks consist of local women entrepreneurs who are deeply embedded in rural communities, leveraging personal relationships, trust, and informal social structures to distribute clean energy products. Entrepreneurs act as trusted intermediaries, engaging potential customers through direct personal interactions, demonstrations, and peer referrals, enhancing consumer adoption in off-grid areas.
2. Ongoing training and capacity-building efforts: Solar Sister's training programme reinforces women's entrepreneurial capabilities, covering financial literacy, marketing and bookkeeping, product knowledge, sales techniques, and leadership and personal skills development. Entrepreneurs regularly participate in interactive workshops, mentoring sessions, and peer-to-peer learning opportunities, refining their business skills and technical expertise. This capacity-building approach enhances entrepreneur performance, product adoption, and customer satisfaction.
3. Adaptability through entrepreneurial diversification: This enables women entrepreneurs to supplement solar product sales with complementary business activities, such as agricultural trading, mobile phone services, or small retail ventures. This diversification strengthens their economic resilience, stabilises income, and mitigates risks associated with fluctuating demand for energy products, ultimately contributing to long-term sustainability.
4. Strategic partnerships with international organisations, NGOs, and renewable energy manufacturers: These collaborations (e.g., with UN Women, Greenlight Planet, and d.light) provide technical expertise, financial resources, product sourcing, and distribution logistics, enabling Solar Sister to extend its operational reach, enhance product availability, and sustain effectiveness across diverse rural contexts.

Solar Sister exemplifies the transformative potential of inclusive social enterprises in promoting sustainable energy solutions and gender equity across rural communities.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Women's economic empowerment and increased gender equality (direct).
- Enhanced household incomes (direct and indirect).
- Improved educational opportunities (indirect).

30 The last-mile distribution model refers to strategies aimed at delivering products or services directly to remote, underserved communities that are typically beyond the reach of traditional retail or distribution networks. In the case of Solar Sister, this model is implemented by training local women entrepreneurs, who leverage their personal and community relationships to distribute clean energy products directly, ensuring reach, local adaptability, and high adoption rates (Gray et al., 2018; Heuër, 2017).

- Expanded rural access to clean, affordable energy (direct).
- Reduced health and safety risks from hazardous energy sources (indirect).

ENABLING CONDITIONS:

- Community-based last-mile distribution networks.
- Comprehensive entrepreneur training and capacity building.
- Adaptable and diversified business models, ensuring entrepreneurial diversification.
- Supportive strategic partnerships and external collaborations

Sources: Based on Allen and Chan (2015), Gray et al. (2018), Heuër (2017), Mahajan and Bandyopadhyay (2021), Misra (2015), and Pinneo (2024).

The positive effects of inclusive business models in the energy sector that include underserved populations (such as the examples in the boxes above) are maximised when private energy solutions meet **higher-tier standards** (Tier 3 and above) of the World Bank's Multi-Tier Framework, enabling productive uses and improving livelihoods[31]. They also succeed when they are responsive to communities and when their design incorporates social safeguards, ensuring that innovation and entrepreneurship serve inclusive outcomes, rather than reinforcing divides. Costa Rica's Coopeguanacaste cooperative offers a good example of a **community-driven initiative** that supports local economic growth and social equity (see Box 3.2.C).

Box 3.2.C. Case study: Coopeguanacaste electricity cooperative (Costa Rica)

Coopeguanacaste, one of Costa Rica's four major rural electrification cooperatives, established in the 1960s, has been vital in expanding electricity access, particularly in rural areas. By 2023, the cooperative had achieved 100 percent renewable energy generation, supplying electricity to approximately 90,000 members across nearly 3,700 km^2— the largest rural coverage of any of Costa Rica's electricity distribution companies.—and directly supporting around 400 jobs. Beyond basic electricity distribution, Coopeguanacaste has diversified its offerings to include the sale of energy-efficient appliances, the operation of two mini-hydropower plants, and the provision of high-speed internet and digital TV services to over 5,000 households. These renewable energy initiatives—including hydroelectric, wind, and solar projects—significantly contribute to Costa Rica's near-universal electrification, with rural cooperatives delivering electricity to roughly 40 percent of rural areas. Notably, Coopeguanacaste operates a 5,023 kWh solar plant in Guanacaste, aligning with Costa Rica's commitment to sustainable energy.

Coopeguanacaste's cooperative energy initiatives have effectively reduced energy and economic inequalities. The impetus for rural electrification emerged directly from local communities seeking diversified income sources and improved living conditions through reliable electricity for household needs, such as cooking and lighting. Reliable energy access has also facilitated economic growth by enabling ecotourism, agro-industry, and increased household consumption, thereby allowing rural communities to actively participate in Costa Rica's broader economy.

The cooperative governance model, characterised by collective decision-making through democratic elections of representatives by members, regular community assemblies, transparent management practices, and reinvestment of profits into community-driven projects, ensures strong local engagement, community empowerment, and long-term sustainability, and contrasts with more centralised electricity distribution approaches.

31 The Multi-Tier Framework for Energy Access (MTF) | ESMAP measures energy access on a scale from Tier 0 (no access) to Tier 5 (full, reliable, and high-capacity access). Tier 3 and above represent service levels sufficient for productive uses, characterised by reliable electricity availability of at least eight hours per day, sufficient power capacity for basic appliances and productive activities (e.g., small machinery, refrigeration), and affordable and safe connection quality. These tiers enable substantial economic and social benefits compared to lower tiers (Bhatia and Angelou, 2015).

Several **enabling conditions** have significantly contributed to the success of Coopeguanacaste and similar energy cooperatives in Costa Rica:

1. Costa Rica's longstanding political stability, dating back to the mid-20th century, has fostered strong governmental and public support for community-driven electrification initiatives, with universal energy access viewed as a fundamental right.
2. Additionally, the influence of the United States' foreign policy during the 1960s provided an initial stimulus for developing cooperative models, while stable economic conditions laid a robust foundation for sustained electrification investment.
3. Favourable climatic conditions, particularly consistent solar and hydro resources, further supported renewable energy development.

Nevertheless, certain regulatory challenges remain, notably tariff schemes that are insufficiently designed for smooth transitions towards distributed solar power generation[32]. Despite these regulatory constraints, Coopeguanacaste and peer cooperatives remain integral to Costa Rica's rural development and renewable energy transformation, offering valuable lessons for similar global initiatives.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Expanded rural electricity access (direct).
- Enhanced economic participation and income diversification (indirect).
- Strengthened community governance and empowerment (direct and indirect).
- Improved living conditions and quality of life (indirect).

ENABLING CONDITIONS:

- Strong and sustained political stability[33].
- Supportive historical context and cooperative development models[34].
- Stable economic conditions for sustained investment[35].
- Favourable natural resources and climatic conditions.

Sources: Based on Cornick and Lara (2020), Madriz-Vargas et al. (2016), Ranalder (2017), and coopeguanacaste.com.

The positive impact of private sector initiatives on energy equity is not automatic. Scaling these contributions requires deliberate public stewardship, and explicit social mandates, such as cross-subsidisation and lifeline tariffs, where higher-paying industrial customers subsidise lower rates for poorer households (Cicala, 2021; Estache et al., 2001)[36]. Regulatory frameworks and results-based contracts can help to incentivise companies and are essential for balancing private efficiency with equitable outcomes (Foster and Rana, 2020; World Bank, 2017b; World Bank, 2018c).

32 Tariff schemes in Costa Rica, originally designed for centralised power generation models, do not adequately accommodate distributed generation, such as residential solar photovoltaic systems. Specifically, net-metering and tariff-setting methodologies remain underdeveloped, limiting the financial viability and attractiveness of small-scale solar investments and slowing the transition towards decentralised renewable energy adoption (Cornick & Lara, 2020).

33 Costa Rica's political stability is rooted in its longstanding democratic governance, stable democratic institutions, abolition of the military in 1948 (redirecting resources to social programmes), and continuous investment in social welfare, education, and infrastructure (e.g., Cornick & Trejos, 2016; Lehoucq, 2010).

34 The country's cooperative movement was influenced by historical factors, including active governmental support, land reforms, and foreign technical and financial assistance—particularly from U.S. institutions in the 1960s. This historical context facilitated the growth of cooperative models emphasising collective ownership, democratic governance, and rural community empowerment (e.g., Madriz-Vargas et al., 2016; Vo, 2016).

35 Costa Rica's stable economic environment, characterised by consistent growth, prudent fiscal policies, and diversification beyond agriculture into sectors such as tourism and renewable energy, has provided a solid foundation for sustained public and private investments in rural electrification and renewable energy infrastructure (OECD, 2020; World Bank, 2023).

36 Cross-subsidisation refers to charging higher tariffs to wealthier or industrial consumers to fund lower-priced services for low-income households, ensuring affordability. Lifeline tariffs provide a baseline quantity of electricity at a highly subsidised rate, typically sufficient for basic needs like lighting and cooking, directly supporting poorer households' access to essential energy services (e.g., Abdullah et al., 2005).

This includes performance-based subsidies tied directly to service provision for low-income communities; output-based aid models that provide payments upon independently verified delivery of energy services to disadvantaged households; and targeted fiscal incentives including tax relief or concessional financing conditional on meeting equity and universal access targets. Simple efficiency measures, such as distributing LED bulbs or energy-saving appliances, can also significantly lower household energy costs and increase disposable incomes[37]. For instance, Peru's combination of grid extensions and decentralised renewable solutions (SHSs and mini-grids)—supported by cross-subsidisation mechanisms (e.g., the Electricity Social Compensation Fund, FOSE) and regulated tariffs for off-grid services—contributed to significantly raising rural electrification from 24 percent (2001) to approximately 90 percent recently, benefiting remote communities that are beyond the reach of the traditional grid (Banal-Estañol et al., 2017; Hidalgo-Crespo et al., 2022; Soler Guzmán et al., 2021; World Bank, 2019a).

Without the following conditions, privatisation risks deepening inequalities, through unaffordable tariffs, reduced service coverage, or a focus on commercially viable areas to the detriment of marginalised populations.

Key enabling conditions for inclusive investments in energy:

- **Supportive national policy:** Lifeline tariffs, cross-subsidisation (where higher-paying industrial customers subsidise lower rates for poorer households), and targeted subsidies for the most disadvantaged[38].
- **Strong institutional capacity and regulation:** Competent institutions—such as independent energy regulatory agencies, transparent procurement bodies, and well-equipped rural electrification agencies—that are able to effectively manage contracts, enforce regulations for affordable access, and maintain quality standards managing contracts, notably via streamlined licensing[39]. Competent institutions typically feature clear mandates, transparency, accountability, adequate human and financial resources, technical expertise, and strong enforcement capacities, which can help them to contribute to the achievement of national energy access and equity objectives. (e.g., Energy Sector Management Assistance Program, 2022).
- **Complementary infrastructure development:** Coordinated development of transportation, digital connectivity, and financial services to maximise energy investments' impacts.
- **Community support and networks**, in particular to ensure the implementation of the last-mile distribution model or governance committees.

37 LED bulbs and energy-saving appliances can significantly lower household electricity consumption and related costs. LED lighting consumes approximately 75 percent less energy and lasts 25 times longer than traditional incandescent bulbs. Similarly, energy-efficient appliances (such as refrigerators, air conditioners, and cooking equipment) use substantially less electricity than conventional models, reducing overall household energy expenditures and enhancing affordability for lower-income households (International Energy Agency, 2022; U.S. Department of Energy, n.d.).

38 Subsidy designs must explicitly target underserved communities, avoiding the historical trend whereby subsidies disproportionately benefit wealthier households: for instance, across developing countries, approximately 45 percent of fossil fuel subsidy benefits accrue to the richest quintile, while only 7 percent reach the poorest 20 percent (Coady et al., 2015).

39 Streamlined licensing involves simplifying and expediting regulatory approval processes for renewable energy projects, such as solar, wind, and mini-grid developments. Measures can include creating a single-window clearance system, reducing administrative requirements, standardising documentation, and establishing clear timelines for approval (Moreno et al., 2017). Such simplifications can significantly lower project costs, attract private investment, and accelerate energy deployment, which can specially benefit rural or underserved areas.

To translate these insights into actionable steps for implementing Global Gateway, the following guidance highlights key principles that should be applied in order to align energy investments with inequality reduction goals.

Strategic guidance for Global Gateway's energy/climate change pillar:

DO'S

- **Prioritise regions with high levels of energy poverty**, leveraging PPPs for renewable off-grid solutions.
- **Invest in innovative and blended financing, to ensure affordability:** Concessional loans, PAYG with a last-mile distribution model, guarantees, microfinance, de-risked public–private funds[40], results-based contracts, and ad-hoc financial structures similar to asset recycling instruments[41].
- **Foster inclusive, gender-sensitive business models** to empower women and local companies: Comprehensive entrepreneur training and capacity building, entrepreneurial diversification, and strategic partnerships with international organisations, NGOs, and manufacturers.
- **Coordinate energy investments closely with complementary infrastructure** (digital connectivity, transportation).

DON'TS

- **Do not prioritise profitability over affordability, equity, or universal access objectives** (include equity and affordability criteria in tender and licensing processes and include social impact assessments as part of project approval). Instead, align firms' incentives with equity goals: for example, through performance-based subsidies tied to service delivery for low-income groups, output-based aid provided upon the achievement of verified equitable outcomes, or interest rate incentives conditional on meeting universal access targets.
- **Avoid tariff structures that disproportionately disadvantage low-income consumers** (introduce progressive tariff designs, cross-subsidisation models, or lifeline tariffs that guarantee a minimum level of affordable consumption).
- **Prevent frequent, unregulated disconnections** without targeted protection measures (establish clear disconnection protocols, grace periods, and targeted social protection schemes, such as energy vouchers or consumption subsidies).
- **Avoid privatisation without frameworks** *that protect rural or less profitable regions* (universal service obligations in contracts, performance-based incentives for rural coverage, and private investment with targeted public subsidies or blended finance).

> *For instance, the experience of South Africa's state-owned utility, Eskom, highlights the risks of inadequate governance and ineffective oversight in public–private engagements within the energy sector. Eskom's heavy reliance on privately owned coal suppliers has resulted in rising electricity tariffs and frequent load-shedding. These power shortages and tariff increases have disproportionately burdened low-income households, exacerbating energy poverty and economic inequality. Eskom's situation illustrates that even without privatisation, private sector involvement through procurement and supply chain management—if poorly regulated—can worsen inequalities (Baker et al., 2015; Baker & Phillips, 2019).*

The strategic guidance outlined above can inform the rollout of ongoing Global Gateway energy projects. The list below identifies current initiatives where such inclusive approaches could enhance impact and equity.

40 De-risked public–private funds are funds where public entities (donors/development finance institutions/multilateral development banks) absorb the first losses through investing in junior equity to cover part of the risks private investors are not willing to take. These structures make it possible to achieve scale and high leverage through pooling private and public resources together and offer adequate risk/return for investors, while also lowering their cost of due diligence. The involvement of a well-reputed asset management company is an asset as it can bring its institutional client network and enhance visibility in the market.

41 Ad-hoc financial structures similar to asset recycling instruments are structures that allow governments in partner countries to transfer (partially or fully) their existing or new sustainable infrastructure to the private sector, thereby funding them without increasing—or perhaps even reducing—their public debt. These structures usually involve an ad-hoc special purpose vehicle (SPV) created to offload the sustainable infrastructure assets partially or entirely to the private sector, thereby freeing up their balance sheets and creating fiscal capacity. The SPV should be accompanied by appropriate de-risking mechanisms and technical assistance on structuring.

Energy and climate change: selected Global Gateway projects, per region:

AFRICA
Energy Efficiency in Buildings.

ASIA AND THE PACIFIC
South Asia Energy Connectivity, Rogun Dam Hydroelectric, Just Energy Transition Partnership.

LATIN AMERICA AND THE CARIBBEAN
Global Green Hydrogen, Electricity market Integrations, Renewable Energy Facilities.

EASTERN NEIGHBOURHOOD
Termoelectrica: Chisinau District Heating, Black Sea Connectivity (electricity).

SOUTHERN NEIGHBOURHOOD
ELMED Interconnection, P2X Hydrogen Power Plant.

WESTERN BALKANS AND TÜRKIYE
Floating Solar Photovoltaic Power Plant.

Source: European Commission, 'Global Gateway flagship projects'.

In sum, equitable, affordable, and reliable clean energy access is fundamental for reducing poverty and inequalities, and for driving inclusive growth. While private sector innovation can accelerate the expansion of energy access, targeted regulation, inclusive subsidies, and proactive public–private collaboration often remain crucial for ensuring equitable outcomes and sustainable development.

3.3. Transport

Transport infrastructure and services influence inequality by determining spatial and social inclusion. Poor accessibility and connectivity isolate rural communities and restrict low-income urban residents and citizens with reduced mobility, exacerbating poverty and limiting economic participation and private sector activities. Unregulated transport growth can also risk exacerbating congestion: for instance, high subsidies to drivers and unclear caps on vehicles in operation can increase the number of vehicles on the road, leading to market inefficiencies. Conversely, **improved transport expands market access for the private sector, employment, and essential services for disadvantaged groups, fostering social inclusion and reducing inequalities** (Bajar & Rajeev, 2016; Scholl et al., 2022). For example, rural roads in Bangladesh reduce transport costs, boost agricultural productivity and incomes, and disproportionately benefit poorer households, reducing both poverty and inequality (Khandker et al., 2009). Similarly, India's PMGSY rural road programme, which has constructed over 100,000 roads since 2000, has substantially improved employment opportunities, market access, and agricultural practices, particularly benefiting lower-income groups (Asher & Novosad, 2020; Aggarwal, 2018).

Regional transport corridors, integrating networks of roads, railways, and ports, can also significantly reduce spatial inequalities. Africa's Northern Corridor, linking Kenya's Mombasa port with landlocked countries[42], has markedly decreased transports costs, boosted regional trade, and facilitated regional economic inclusion (Nathan Associates, 2011; Northern Corridor Transport Observatory, 2016). Similarly, the Maputo Corridor between Mozambique and South Africa has promoted regional economic integration and employment generation (Sequeira et al., 2014; Byiers & Vanheukelom, 2014). Effective **last-mile connectivity** (feeder roads, local transport) remains crucial for maximising infrastructure's inclusive potential.

Private sector participation, via construction firms, logistics providers, and mobility services, plays a critical role in addressing transport inequalities. These actors provide innovative, efficient, and affordable transport solutions in rapidly urbanising contexts. Ride-sharing platforms and micro-mobility services (e.g., e-bikes) increasingly bridge crucial 'last-mile' gaps, as in Indonesia, where shared mobility services reduce commuting time and costs, directly benefiting low-income urban residents (AlphaBeta, 2017).

42 Uganda, Rwanda, Burundi, and eastern Democratic Republic of Congo.

However, market-driven transport investments can typically also favour profitable routes and higher-income users, potentially neglecting disadvantaged communities in the absence of targeted incentives. For instance, Curitiba's transport system, despite early acclaim for integrated land-use and transit planning (Cervero, 1998; 2013), has faced criticism for disproportionately favouring higher-income residents, highlighting the importance of vigilant planning and regulation (Turbay et al., 2024; de Almeida Correia, 2025).

Inclusive transport development therefore requires PPPs that are explicitly designed to enhance accessibility and affordability for all users, including the elderly, persons with disabilities, families with strollers/pushchairs, women and children, and tourists with luggage, as well as for low-income and marginalised populations. In particular, **bus rapid transit (BRT) systems can significantly improve mobility for lower-income residents**. For instance, in Peru, the El Metropolitano BRT system integrates feeder routes connecting peripheral low-income neighbourhoods to main transit lines and includes infrastructure improvements like the 'Stairs of Solidarity' to enhance access from informal settlements (, n.d.). Another example is Bogotá's TransMilenio PPP, which reduced commute times by approximately 25 percent, substantially expanding access to jobs and services for disadvantaged communities (Bocarejo & Oviedo, 2012; Bocarejo et al., 2015; Global Infrastructure Hub, 2020; Hidalgo & Muñoz, 2014)[43]. Other similar successful initiatives include Janmarg BRT in Ahmedabad & TransJakarta, which is Asia's first major BRT system (Suzuki et al., 2013; Wright & Hook, 2007). Additionally, Panama City's MiBus PPP, which brought about a **transition from informal to formal** public bus operations, is an example of an effort to achieve more inclusive urban mobility (see Box 4.3.A).

Box 3.3.A: MiBus (Panama)

MiBus, a private operator contracted by Panama City's government, has played a central role in formalising Panama City's previously informal *diablos rojos* bus system into a structured, government-regulated service known as the Metro Bus network. MiBus formalised employment contracts for bus drivers, ensuring standardised working hours, employment benefits, and productivity bonuses (including possible performance-based and punctuality rewards, and safety-related incentives). This facilitated a smoother transition to regulated employment. The company also manages comprehensive bus network operations, including route design, planning, implementation, and monitoring, positioning it centrally within Panama City's transport sector reform.

MiBus's transition to a formalised system has enhanced equity, safety, and reliability. Before MiBus, the informal system lacked regulated fares, resulting in unpredictable costs and inefficient routes. MiBus introduced standardised fares and clear routes, ensuring affordability and transparency for all passengers. Moreover, it replaced unreliable schedules, poorly maintained vehicles, and inadequate working conditions that were prevalent under the informal system, substantially improving passenger safety, reliability, and employment quality, particularly benefiting lower-income commuters. Technological improvements, such as the MiBus mobile app, have also enhanced the passenger experience by offering real-time bus tracking and route planning capabilities.

MiBus has positively contributed to environmental outcomes by deploying buses with improved fuel efficiency and reduced emissions, though additional advancements are needed to maximise these benefits[44]. Pilot projects have assessed the integration of electric buses into the transit network and progress has recently been made towards fleet electrification: in 2024, the Inter-American Development Bank (IDB) approved a $38 million loan and a $9 million grant explicitly to accelerate MiBus's transition to electric mobility. This financing supports the acquisition of 53 electric buses, charging infrastructure, and associated capacity building, marking a major step towards sustainable urban transportation in Panama City.

43 Global Infrastructure Hub, 'Colombia. TransMilenio Bus Rapid Transit'.

44 Additional advancements needed include further expanding the electric bus fleet, increasing investment in charging infrastructure, integrating renewable energy sources for powering electric buses, enhancing traffic management systems, and continuous capacity building among transport operators and maintenance staff to ensure the successful long-term transition to sustainable urban mobility (IDB, 2024; Viscidi, 2021; Mattesco & Sassone-Lawless, 2018).

Two significant **enabling conditions** have supported MiBus's integration:

1. Strong government commitment to formalising public transport provided essential institutional backing and regulatory clarity, facilitating MiBus's adherence to labour laws, operational guidelines, and service standards.
2. The PPP model adopted by MiBus encouraged innovation and efficiency improvements.

Overall, MiBus has modernised Panama City's public transport, transitioning from informal and unreliable operations into a structured, sustainable, and inclusive urban transit network. Despite ongoing challenges with traffic congestion and incremental electrification progress, MiBus has improved urban mobility, employment formalisation, and technological integration, marking significant steps towards inclusive, sustainable, and efficient urban transportation.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Affordable, predictable, and transparent fares (direct).
- Enhanced reliability and safety for passengers, as well as other road users (direct and indirect)[45].
- Improved employment conditions for transport workers (direct).
- Environmental benefits and sustainability outcomes (indirect).

ENABLING CONDITIONS:

- Strong government commitment and a clear regulatory framework.
- Well-structured and transparent PPP model[46].
- Targeted financial support for a sustainable transition, focusing on electric buses.

Sources: Based on IDB (2024), Gonzalez Castillo (2019), Mattesco and Sassone-Lawless (2018), Ortegon-Sanchez and Tyler (2016), and Viscidi (2021).

Mass transit infrastructure (metro rail, BRT), structured as PPPs with affordable fares and accessibility features, remains central to equitable urban mobility, exemplified by Bangkok's Mass Rapid Transit (MRT) system, which incorporates extensive accessibility measures (see Box 4.3.B).

45 Enhanced reliability and safety improvements have direct effects on inequalities because lower-income groups often depend heavily on public transport. Immediate improvements in safety and predictability of commuting directly impact their daily well-being, access to economic opportunities, and overall mobility, whereas the indirect effects involve broader economic and social benefits resulting from these immediate improvements.

46 Characterised by clearly defined roles, responsibilities, performance standards, accountability mechanisms, and risk-sharing arrangements. In contrast, ineffective PPPs often lack clarity regarding responsibilities, risk allocation, or performance expectations, leading to disputes, project delays, financial inefficiencies, and failure to achieve intended social or economic outcomes (World Bank, 2017c).

Box 3.3.B: MRT (Thailand)

The Bangkok MRT system, implemented through a PPP between the Mass Rapid Transit Authority (MRTA) and Bangkok Metro Public Company Limited (BMCL), is integral to Thailand's urban transportation infrastructure. Spanning over 70 kilometres across the Blue and Purple Lines, the MRT network serves millions of daily commuters. Although initially delayed by financial constraints, procurement inefficiencies, and limited experience with large-scale PPPs, the MRT has significantly enhanced Bangkok's public **transportation** network, and the project has become a leading example of private sector engagement effectively addressing public sector knowledge and implementation gaps.

The MRT significantly contributes to reducing urban inequalities in Bangkok by enabling affordable and efficient access to employment, education, and essential services. The MRT system has enhanced urban mobility, accessibility for users, and overall quality of life by alleviating traffic congestion and reducing pollution, benefiting a broad range of demographics across the metropolitan area.

Crucially, the MRT explicitly addresses accessibility for persons with disabilities, elderly users, and families with strollers/pushchairs, and safety concerns for women. Stations include elevators for barrier-free platform access, tactile paving and braille signage for visually impaired passengers, and dedicated wheelchair spaces inside train cars. Assistance is provided to disabled passengers upon request, further supporting diverse needs. Safety features—such as well-lit platforms, surveillance systems, and emergency response mechanisms—particularly enhance security for female passengers. Additional initiatives by the United Nations Development Programme (UNDP) Thailand have further promoted pedestrian accessibility and barrier-free movement around stations, such as in the Victory Monument area.

Several **enabling conditions** have contributed to the MRT's success:

1. Strong government backing, driven by public demand for better transportation, provided essential political support.
2. Economically, the project overcame initial financing hurdles through increased private sector participation, incentivised by mechanisms such as clear revenue-sharing agreements, guarantees on minimum ridership levels, provision of land rights for commercial development around stations, and supportive risk-sharing arrangements between public and private partners. These incentives attracted private investments, enhancing financial stability and facilitating managerial innovation. Private sector engagement also improved service quality, through advanced risk assessment practices and project feasibility studies.

Thailand's PPP framework has been instrumental in guiding the project's implementation, although further strengthening—particularly in transparency, procurement standardisation, and accessible financing mechanisms—remains necessary.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Enables affordable access to employment, education, and essential services (direct).
- Reduced commuting times and transportation costs (direct and indirect).
- Enhanced urban quality of life and environmental conditions (indirect).

ENABLING CONDITIONS:

- Strong governmental commitment and public demand for transport improvements
- Active private sector investment addressing financial and managerial gaps
- Structured PPP regulatory framework that can evolve and adapt. This adaptability has been driven by continuous improvements in governance practices, enhanced institutional capacity, and iterative refinements to PPP contract management, informed by past implementation experiences.

Sources: Based on Chaiittipornwong et al. (2024), Lertsethtakarn (2018), Navalersuph and Charoenngam (2021), Rathie (2022), and Tourism Authority of Thailand.

Incorporating the real estate sector in transport planning is essential for ensuring inclusivity and delivering a truly comprehensive urban development strategy. Real estate investments, when strategically integrated with transport infrastructure, can facilitate mixed-use neighbourhoods, expand affordable housing options, and help distribute economic activity more evenly across urban areas, thereby reducing spatial inequality. The Mega Manila Dream Plan in the Philippines exemplifies this integrated approach (Japan International Cooperation Agency, 2014) (see Box 3.3.C).

Box 3.3.C: Mega Manila Dream Plan (Philippines)

The Mega Manila Dream Plan is a large-scale urban infrastructure initiative mobilised through a PPP involving multiple private sector actors, Metropolitan Manila (Metro Manila), and local governments, which has the aim of comprehensively transforming the transport network. With an estimated investment of approximately $60 billion, the initiative plans to connect major transport hubs—such as seaports and airports—through a robust infrastructure system comprising expressways, a 91-kilometre north–south commuter rail line, and a 75-kilometre north–south subway. This extensive connectivity aims to resolve Metro Manila's longstanding congestion problems and inadequate public transport services. Leveraging partnerships with private entities specialising in real estate and transportation development allows the initiative to incorporate advanced technical expertise, substantial financial resources, and global urban development best practices, thus enhancing implementation efficiency in a way that would be beyond the ability of the public sector alone. Moreover, strategically integrated real estate developments linked to infrastructure investments promote urban cohesion, facilitate balanced growth, and maximise socioeconomic opportunities across Metro Manila.

The Mega Manila Dream Plan actively addresses various dimensions of inequality by enhancing equitable access to transport, improving connectivity between economic centres, and facilitating increased financial investment in inclusive and accessible infrastructure. Expanded transportation networks aim to connect low-income and semi-urban communities to urban employment centres, thereby enhancing economic opportunities and fostering upward social mobility. Improved public transport services can significantly decrease reliance on expensive private vehicles, reducing commuting costs for residents. Furthermore, coordinated infrastructure and real estate development strategies encourage balanced urban expansion, mitigating the concentration of wealth in selected districts and promoting inclusive growth throughout Metro Manila.

Two **enabling factors** underpin the Mega Manila Dream Plan's advancement:

1. The engagement of prominent real estate and infrastructure companies has injected global best practices, extensive expertise, and critical financial backing into the project.
2. Additionally, the Philippines' adoption of the updated PPP Code in 2023 has established a standardised legal framework that enhances transparency, ensures fair procurement processes, promotes sustainable financing provisions, and effectively balances public–private interests. This regulatory framework mitigates financial risks, promotes operational efficiency, and aligns the infrastructure initiative with national developmental objectives.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Improved accessibility and connectivity for low-income communities (direct).
- Enhanced economic opportunities and employment access (indirect).
- Promotion of balanced, inclusive urban growth through private real estate construction (indirect).
- Reduced reliance on costly private transportation (indirect).

ENABLING CONDITIONS:

- Robust PPPs leveraging global expertise, coupling different areas of expertise: not only transport, but also real estate.
- Standardised PPP regulatory framework promoting transparency and efficiency.
- Established local commitment—through the involvement of local governments—to sustainable urban transport.

Sources: Based on Barrido (2024), De Gruyter et al. (2016), and Mouton and Shatkin (2019).

The case studies presented above highlight how inclusive transport systems, when strategically designed, can improve accessibility, affordability, and economic opportunities for marginalised groups. From these experiences, several key enabling conditions emerge as essential for ensuring that transport investments reduce, rather than reinforce, inequalities.

Key enabling conditions for inclusive investments in transport:

- **Balanced regulatory frameworks and strong government commitment to formalising public transport:** Robust oversight balancing private efficiency and public equity, explicitly addressing tensions between cost recovery and universal access.
- **Complementary investments:** Feeder roads, alternative routes for low-income users, logistics, involvement of real estate companies, and market access infrastructure supporting economic participation of disadvantaged communities and groups.
- **Community engagement:** Local involvement in planning and labour-intensive construction methods that maximise employment, aligning investments with community needs.

To operationalise these insights within Global Gateway, the following strategic guidance outlines how transport can be designed and financed to foster inclusion and equitable access across regions.

Strategic guidance for Global Gateway's transport pillar:

DO'S

- **Prioritise transport infrastructure that explicitly targets underserved and disadvantaged populations:** Direct investments toward informal settlements, peri-urban and rural areas; upgrade road and mobility infrastructure in low-income zones; and ensure last-mile connectivity through inclusive spatial planning, needs assessments, and multimodal transport integration.
- **Invest in affordability measures:** Cross-subsidies, affordable tariffs, fare caps, and targeted subsidies that ensure affordability for lower-income users.
- **Ensure integrated planning:** Routes, fares, and coverage that are explicitly designed for universal access and inclusivity.
- **Support the transition from informal to formal transport systems:** Provide regulatory pathways for formalisation, public financing tools to upgrade fleets, and capacity building for informal operators. Panama City's MiBus PPP exemplifies how formalising previously informal bus operations can enhance service reliability, working conditions, and inclusiveness in urban mobility.
- **Structure PPPs** to mandate inclusive features, including accessibility features for users with reduced mobility, feeder roads, affordable fares, gender-sensitive practices, and local employment opportunities. Implement financial mechanisms like viability gap funding, cross-subsidies, and performance-based incentives to ensure inclusive and sustainable service coverage.
- **Incorporate gender-sensitive and safety-focused** design and operational practices to enhance women's mobility needs. A similar approach should be applied to persons with disabilities[47].
- **Include broad consultations with end users and communities** when designing and monitoring transport operations.

DON'TS

- **Avoid purely profit-driven private transport investments** without enforceable inclusive provisions: Ensure that all private sector contracts and concessions include mandatory service obligations—such as coverage of low-income areas, capped fare increases, and accessibility requirements—monitored through enforceable performance indicators and social impact assessments.

47 Accessibility for persons with disabilities has been explicitly addressed in projects such as Quito's Metro Line 1, supported by the EU and European Investment Bank. The system incorporates barrier-free stations equipped with elevators, braille signage, and tactile paving, facilitating easier navigation for individuals with visual impairments (Chen & Jaramillo, 2024).

> *For instance, the Gautrain rapid rail project in South Africa has faced criticism for primarily serving wealthier commuters and neglecting poorer areas in Gauteng province. Due to its expensive fares and limited network reach into economically disadvantaged townships, Gautrain's PPP model potentially reinforces socioeconomic divisions, benefiting high-income users while marginalising lower-income populations who are dependent on less reliable, lower-quality public transportation. This illustrates how inadequate consideration of affordability, integration, and geographic inclusiveness in transport PPPs can unintentionally deepen existing inequalities (Thomas, 2013; Todes, 2012).*

- **Avoid neglecting complementary investments** in feeder infrastructure, logistics, and market accessibility: Prioritise parallel investments in secondary roads, footpaths, last-mile connectivity, and intermodal facilities that connect remote or informal communities to core transit systems, markets, and essential services.
- **Do not minimise or omit community engagement processes**, which can lead to misaligned priorities and inadequate local support.

The list below presents selected Global Gateway transport projects, where the application of the enabling conditions and strategic guidance discussed above could strengthen the inclusiveness and equity of outcomes.

Transport: selected Global Gateway projects, per region:

AFRICA
Sustainable Aviation Fuels.

ASIA AND THE PACIFIC
Trans-Caspian Transport Corridor, Sustainable Aviation Fuels.

LATIN AMERICA AND THE CARIBBEAN
Metro line 2 in Lima, Port Infrastructure (Brazil), Urban Transport Development in Santo Domingo.

EASTERN NEIGHBOURHOOD
Yerevan Customs and Logistics Centre, Moldova Roads Rehabilitation, Sisian-Kajaran Road (North–South Corridor).

SOUTHERN NEIGHBOURHOOD
Railway Upgrades (Tanta-El Mansoura-Damietta).

WESTERN BALKANS AND TÜRKIYE
Tirana by-pass: Blue Highway

Source: European Commission, 'Global Gateway flagship projects'.

In sum, efficient, affordable, accessible, and inclusive transport infrastructure plays a critical role in reducing spatial and economic inequalities by improving access to employment, education, and essential services, particularly for lower-income and marginalised communities. While PPPs and private sector innovation can significantly enhance urban mobility, their success depends on equity-oriented planning and meaningful stakeholder engagement to ensure that transport development delivers inclusive and sustainable outcomes.

3.4. Health

The health sector provides a key illustration of how private sector engagement can either significantly reduce inequalities or exacerbate them. Stark health disparities, reflected in unequal life expectancy, disease burdens, and access to essential services, remain deeply entrenched between and within countries. While wealthier populations often access high-quality care, either domestically or abroad, poorer communities are frequently left behind, facing unaffordable costs, limited infrastructure, and low-quality services. These inequalities have broader implications for economic development: ill health reduces labour productivity, undermines learning outcomes in children due to undernutrition or illness, and weakens workforce resilience. For the private sector, this translates into a smaller, less skilled labour pool and weaker consumer demand, highlighting the direct economic case for investing in equitable healthcare.

Private sector innovation has emerged as a powerful force in bridging some of these gaps, particularly when public systems are overstretched. Private healthcare providers, including hospitals, pharmacies, diagnostic centres, and pharmaceutical companies, often expand access in underserved areas. The development and distribution of affordable generic medicines, for instance, significantly improves equity in treatment access. Mechanisms such as differential pricing and voluntary licensing have led to dramatic reductions in HIV drug costs across Africa. Similarly, health-tech solutions are opening new frontiers: Sofía, a Mexican startup, exemplifies how app-based telemedicine platforms can expand remote care, provide continuity during crises, and strengthen system resilience (see Box 3.4.A).

Box 3.4.C: Sofía (Mexico)

Sofía, a Mexican health-tech startup founded in 2018, significantly expanded healthcare accessibility during the COVID-19 pandemic through app-based telemedicine. Launching its video consultation service in March 2020, initially in Mexico City, before nationwide expansion, Sofía offered remote primary and specialist care, electronic prescriptions, and patient follow-ups through its digital platform. Sofía also introduced the 'Coronaid' programme, providing medical guidelines for COVID-19 triage, testing, treatment, and remote monitoring, aligning closely with protocols established by Mexico's General Directorate of Epidemiology. With free consultations, at-home PCR testing, and integrated electronic medical records, Sofía provided safe and efficient remote healthcare, achieving high patient satisfaction and reinforcing public health measures critical during the pandemic.

Now that the immediate pandemic response has ended, Sofía continues to address systemic healthcare inequalities in Mexico by significantly improving medical access, reducing costs, and enhancing healthcare efficiency. The app-based model particularly benefits rural and underserved urban populations with limited medical infrastructure and typically long wait times for healthcare services. By enabling remote consultations, the platform reduces geographic and financial barriers to high-quality care. During the COVID-19 pandemic, this particularly benefitted vulnerable groups, who were disproportionately affected by the crisis. Furthermore, the platform's integration of electronic medical records supports continuity and preventative care, ensuring patient confidentiality and security while strengthening the overall healthcare ecosystem.

Several **enabling conditions** have facilitated Sofía's rapid adoption and sustained impact. Firstly, technological readiness in Mexico, characterised by growing smartphone usage and internet connectivity, allows for the widespread adoption of telemedicine solutions, especially via Sofía's mobile-first platform, overcoming traditional infrastructure limitations. Secondly, supportive regulatory frameworks around electronic medical records and data security legitimise telemedicine initiatives, facilitating trust among users and healthcare professionals. Lastly, the COVID-19 pandemic significantly accelerated telehealth acceptance, pushing healthcare providers, regulators, and patients towards digital services, as evidenced by the swift uptake of Sofía's Coronaid programme.

Overall, Sofía demonstrates the transformative potential of telemedicine in bridging healthcare gaps, promoting equitable access, and strengthening healthcare resilience.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Expanded healthcare access for rural and underserved communities (direct).
- Reduced geographic and economic barriers to accessing medical services (direct and indirect).
- Enhanced healthcare continuity and preventive care (indirect).

ENABLING CONDITIONS:

- Robust digital infrastructure and technological information (app-based), and high smartphone penetration.
- Supportive regulatory environment for telemedicine and data security.
- Pandemic-driven acceleration of telemedicine adoption.

Sources: Based on Morgenstern-Kaplan et al. (2021), Kozlakidis et al. (2024), and Rocha-Haro et al. (2021).

Private sector logistics are revolutionising service delivery in remote settings. For example, Zipline is using drones to deliver medical supplies across rural Ghana, which has dramatically improved last-mile healthcare access. This was particularly the case during the COVID-19 pandemic (see Box 3.4.B).

Box 3.4.B: Zipline (Ghana)

Zipline in Ghana has significantly enhanced healthcare access by improving 'last-mile' healthcare delivery. Given that a substantial proportion (over 40 percent) of Ghana's population lives in remote, rural areas, with poor infrastructure and long distances to healthcare facilities, the Ghanaian government's partnership with Zipline, an American technology company, has substantially improved medical supply accessibility through innovative drone deliveries of medical commodities. Launched in 2019 as part of Ghana's broader 'Ghana Go Digital' initiative aimed at digitising and enhancing service efficiency and accessibility, Zipline's drones deliver essential medical commodities, such as vaccines, blood products, and medicines—with a particularly strong impact during the COVID-19 pandemic. Operating around the clock from four distribution centres equipped with 30 drones each, the service supports up to 600 daily flights, distributing over 170 different medical products to more than 2,000 health facilities, covering nearly 22 million people. Since its inception, Zipline has delivered nearly 8 million doses of vaccines across Ghana[48].

Zipline's drone technology directly addresses the logistical challenges posed by inadequate healthcare infrastructure and poor road networks in remote regions. Drone deliveries have markedly reduced emergency response times and increased overall healthcare efficiency by bypassing traditional transport constraints, significantly narrowing the urban–rural healthcare access gap. Frontline healthcare workers have reported improved availability of critical medical supplies, especially during emergencies such as vaccine shortages or urgent blood transfusions. The COVID-19 pandemic further underscored this capability, with the drone technology enabling rapid transportation of test samples and vaccines, significantly enhancing disease surveillance and response. Thus, Zipline's drone delivery system exemplifies how technological innovations can substantially diminish healthcare inequalities by ensuring equitable service provision to underserved rural populations.

Several **enabling factors** have contributed to Zipline's successful implementation:

1. Robust government support, aligned with national digitalisation objectives, has provided essential regulatory backing and financial resources.
2. Strategic placement of drone distribution centres has maximised geographic coverage, especially in regions with limited infrastructure.
3. Technological innovations, including AI-driven navigation and automated delivery systems, further enhance reliability and efficiency, positioning the initiative for sustained scalability.

48 Facilities exclusively serviced by Zipline experienced a significant reduction in vaccine stockouts (60 percent fewer) and in missed vaccination opportunities (by 42 percent), compared to traditionally supplied facilities. Notably, Zipline's interventions increased vaccination rates by an average of 21 percentage points across all routine childhood immunisations, potentially saving over 700 children's lives. The COVID-19 pandemic highlighted the scalability of Zipline's delivery model, with monthly vaccine deliveries rising from approximately 800 doses in March 2020 to over 9,000 doses per month by November that year. As at November 2022, Zipline was delivering more than 430,000 vaccine doses monthly, reinforcing its role in public health infrastructure, especially for rural and underserved populations.

4. Collaborative partnerships with private sector, local healthcare providers and international health organisations have supported operational sustainability and effective service integration.

Nevertheless, specific challenges must be addressed for future expansions of similar initiatives. Frontline healthcare workers occasionally note inconsistencies in delivery times and quality, suggesting a need to continuously refine logistical efficiency. Concerns have also emerged around the lack of medical oversight in handling temperature-sensitive supplies, highlighting the importance of integrating medical expertise throughout design and implementation processes. Furthermore, drones remain vulnerable to adverse weather conditions, potentially impacting service reliability, particularly in contexts of increasing climate variability. Lastly, rigorous economic and policy mechanisms, including competitive procurement and transparent public fund management, are vital for ensuring cost-effective, accountable, and scalable private sector interventions.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Enhanced emergency response and healthcare efficiency in rural areas (direct).
- Reduced urban–rural disparities in medical supply access (direct).
- Improved disease surveillance and responsiveness (indirect).
- Increased vaccination coverage and public health outcomes (indirect).

ENABLING CONDITIONS:

- Robust government support and alignment with national digitalisation strategies.
- Strategic geographic placement of drone distribution centres.
- Advanced technological innovation, ensuring reliability and scalability.
- Effective collaborative partnerships and integration with healthcare systems.

Sources: Based on Ata-Bedu, (2018), Atiga et al. (2024), Demuyakor (2020), Sylverken et al. (2022), and Zipline (n.d.).

Private innovation can also help break down silos between sectors by supporting multidimensional projects, which are known to generate stronger impacts on inequality reduction compared to single-dimension projects (OECD, 2009). We Care Solar's 'Solar Suitcase' is one such example, demonstrating how integrated approaches can multiply social returns across sectors (see Box 3.4.C).

Box 3.4.C: We Care Solar (Nigeria)

We Care Solar, an American organisation initially launched in Nigeria, integrates energy and health solutions to significantly improve access to essential healthcare in off-grid rural facilities. Its flagship innovation, the 'Solar Suitcase', is a portable solar-powered unit that provides reliable lighting, powers medical devices, and charges communication tools in remote health centres. Initially designed to reduce maternal mortality, which is particularly high in Nigeria—where in 2010, approximately 40,000 women died annually in childbirth and 4 percent of newborns died within their first month—the Solar Suitcase has substantially improved conditions for critical medical procedures, such as childbirth and emergency interventions. Prior to this solution, healthcare providers often conducted medical procedures under inadequate lighting conditions, using candles, kerosene lamps, or mobile phone flashlights, exacerbating poor health outcomes.

We Care Solar's initiative has effectively reduced inequalities by addressing critical energy shortages in healthcare infrastructure, directly improving maternal and neonatal health outcomes. Beyond maternal care, the Solar Suitcase has proven to be versatile, being successfully adapted to other critical healthcare scenarios, including epidemic response during the Ebola outbreak in Sierra Leone and Liberia, as well as disaster relief in Nepal. Furthermore, comprehensive training programmes have equipped healthcare workers to effectively operate and maintain the solar technology, ensuring sustainability and lasting improvements in healthcare access within marginalised communities.

Several **enabling factors** underpin We Care Solar's successful impact on reducing health inequalities:

1. Strong governmental backing and the organisation's decentralised distribution model have enabled widespread deployment, aligning with broader public health and rural electrification strategies.
2. Strategic partnerships with governments, international agencies, NGOs, and private sector companies, such as Arrow Electronics, have facilitated the widespread distribution of the Solar Suitcase, the implementation of the Light Every Birth initiative (reaching 9,200 health facilities, serving millions of mothers and newborns across several countries in Africa[49]), and a reduction in costs (with the latest Solar Suitcase model 20 percent more affordable than other models). This reduction in costs was achieved through design optimisations, economies of scale from expanded production, strategic sourcing of cost-effective components, and localised partnerships for installation and maintenance. Additionally, a sustainability fund supported by donor contributions and government commitments ensures ongoing operational support, maintaining affordability and effectiveness.
3. Robust advocacy and targeted awareness campaigns have increased acceptance and local ownership.

Overall, We Care Solar's Solar Suitcase exemplifies how innovative cross-sectoral solutions can enhance healthcare quality, promote gender equality by addressing maternal health, and sustainably improve healthcare infrastructure, particularly for underserved rural populations.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Enhanced maternal and neonatal health outcomes (direct).
- Reduced disparities in healthcare access through reliable energy provision (direct).
- Increased gender equality through improved women's healthcare services (direct and indirect).
- Strengthened healthcare infrastructure and epidemic responsiveness (indirect).

ENABLING CONDITIONS:

- Strategic cross-sectoral partnerships and collaborations.
- Strong governmental support, aligned with national health strategies.
- Robust advocacy and targeted awareness campaigns, accompanied by comprehensive training programmes.

Sources: Based on Mahajan and Bandyopadhyay (2021), Ahmed et al. (2020), Izuka et al. (2023), and wecaresolar.org.

49 The Light Every Birth initiative, launched in 2017, aims to ensure that every health facility providing maternity care has reliable solar-powered electricity through the Solar Suitcase. As at 2023, the initiative had equipped over 9,200 health facilities in Liberia, Uganda, Zimbabwe, Sierra Leone, Malawi, Nigeria, and Tanzania. Liberia notably achieved national coverage, in partnership with the Ministry of Health and Social Welfare, United Nations agencies, and NGOs, demonstrating the scalability of this model (see 'Light Every Birth').

Yet private sector innovations in the health sector are not sufficient on their own. While private innovation can significantly enhance healthcare access in underserved areas, they can also bring the risk of exploitation, poor-quality care, and excessive out-of-pocket expenses, potentially trapping vulnerable households in poverty (Oxfam, 2023a; 2023b; Zwi et al., 2001). Annually, approximately 100 million people fall into extreme poverty due to out-of-pocket health expenses (WHO & World Bank, 2017).

Harnessing private sector potential in ways that reduce inequality requires intentional public frameworks. The incentives and business models that drive innovation do not automatically align with equity goals. Profit-oriented solutions may remain inaccessible to the poorest, and digital health tools often exclude those who lack connectivity or digital literacy. Effective policies to overcome these issues include price controls on essential medicines, mandatory service provision in underserved regions, incentives for rural and low-income service delivery, and the enforcement of quality and affordability standards. Initiatives such as differential pricing (charging lower prices in poorer countries) and voluntary licensing for generics improve medication accessibility, exemplified by dramatic price reductions in HIV medication across Africa (Chien, 2007).[50]

Public–private platforms like Gavi, the Vaccine Alliance illustrate how this alignment can be achieved. By leveraging donor financing and negotiating with pharmaceutical companies for bulk purchasing at subsidised prices, Gavi has helped close the global immunisation gap, delivering vaccines equitably across income levels[51]. This model demonstrates that with well-designed coordination, public and private sectors can jointly deliver health outcomes at scale, building more inclusive systems.

Several conditions and interventions are therefore crucial for ensuring an equitable private sector engagement in health.

Key enabling conditions for investments to ensure inclusive healthcare:

- **Robust regulatory frameworks:** Strong oversight (notably in respect of electronic medical records and data security), transparent pricing (particularly for essential medicine), rigorous licensing, and ethical and quality standards ensuring quality care and preventing exploitation.
- **Strategic public–private alignment**: Clearly defined roles aligning private initiatives with national public health goals, avoiding duplication and maximising coverage. Standardising high-quality care across public and private providers can also mitigate health inequalities.
- **Institutional capacity:** Effective institutions managing PPP contracts, enforcing accountability, and ensuring equitable standards, especially in underserved regions. For instance, in Chile, the government strategically contracts private clinics and laboratories to provide healthcare and diagnostic services for public sector patients, aiming to reduce waiting times and improve access. These contracts include regulations and quality standards to ensure efficient and equitable healthcare provision (Bastías et al., 2008; Missoni & Solimano, 2010).
- **Supportive infrastructure and technology:** Reliable electricity, digital connectivity, and logistical systems, enabling private healthcare delivery in remote areas.
- **Community trust and health literacy:** Collaborative outreach and awareness campaigns to build trust and ownership, involving private providers, NGOs, and community health workers, addressing cultural and informational barriers among marginalised groups.

Building on these lessons, the following strategic guidance offers practical directions for integrating private sector contributions within Global Gateway health initiatives, with the aim of improving equitable healthcare access and advancing universal health coverage.

50 See also the Medicines Patent Pool (MPP), a UN-backed initiative that facilitates affordable access to life-saving medications in low- and middle-income countries—especially for HIV and related diseases—through patent pooling, voluntary licensing, and strategic partnerships with private sector companies.

51 Gavi is a global partnership whose primary goal is to increase equitable access to immunisation in lower-income countries. It leverages the strengths of partners such as the World Health Organization (WHO), UNICEF, the World Bank, and the Gates Foundation, collaborating with donors, NGOs, private sectors, vaccine manufacturers, and national governments. For further details, see www.gavi.org.

Strategic guidance for Global Gateway's health pillar

DO'S

- **Prioritise universal and affordable healthcare and medicines** via local generic production, differential pricing, and vaccine alliances (price controls on essential medicines, mandatory service provision in underserved regions).
- **Invest in inclusive technologies** (e.g., drone delivery, remote supply chains) to reach geographically isolated areas. An app-based model can particularly benefit rural and underserved urban populations with limited medical infrastructure and typically long wait times for healthcare services.
- **Promote equitable and inclusive financing models** like output-based aid, subsidised services, and clinical social franchising models[52], guaranteeing affordability and financial protection for low-income populations[53]. Rwanda's Mutuelle de Santé and Ghana's National Health Insurance Scheme (NHIS) exemplify successful models that integrate private providers into publicly funded schemes[54]. In contrast, India's PMJAY, which similarly incorporates private hospitals into publicly funded insurance, shows that private sector engagement can also limit effectiveness in reducing catastrophic health expenditures, indicating the critical role robust regulation plays in ensuring financial protection and equity (Garg et al., 2024).
- **Invest in capacity building and training:** Rigorous accreditation, standardised provider training, and quality guidelines to elevate private sector standards.
- **Strengthen community trust and health literacy**, through partnerships with private providers, NGOs, and local health workers.
- **Explicitly address gender disparities**, through targeted maternal and reproductive health services and gender-sensitive care.

DON'TS

- **Avoid private healthcare expansion via PPPs if robust regulations are not in place**, which risks increasing inequalities. Private sector engagement should be anchored in national health plans and backed by enforceable regulations—covering licensing, service quality, equitable geographic coverage, and pricing transparency—to prevent fragmentation.

  > *For instance, the Queen Mamohato Memorial Hospital in Lesotho, developed under a PPP model, was intended to provide high-quality healthcare services. However, the project faced significant challenges. The hospital consumed more than half of the country's total health budget, diverting resources from primary healthcare and rural health services. This financial strain limited the government's ability to invest in broader health infrastructure and services, exacerbating health inequalities, particularly for rural and low-income populations who had reduced access to essential healthcare services (Eurodad, 2018; Oxfam, 2014). This case illustrates how poorly structured PPPs can lead to disproportionate resource allocation, undermining equity in healthcare access and outcomes.*

- **Do not rely significantly on out-of-pocket payments**, which disproportionately affect poorer households.
- **Do not permit substandard or exploitative practices**, which undermine trust, safety, and equity. Such practices can be avoided by enforcing strict accreditation standards, regular quality audits, and grievance redress mechanisms to ensure ethical conduct, prevent overcharging or unnecessary procedures, and safeguard patient rights across all private healthcare providers.

52 Output-based aid refers to mechanisms where subsidies are provided only after the verification of specific results, e.g., the delivery of defined healthcare services to disadvantaged populations. Subsidised services directly reduce healthcare costs for low-income users by lowering or eliminating service fees. Clinical social franchising involves networks of private healthcare providers contracted under a common brand, delivering standardised, quality assured, and affordable health services to underserved communities (Montagu et al., 2016; World Bank, 2018c).

53 Innovative private sector models that explicitly target low-income populations, including franchised clinics, can effectively narrow healthcare disparities. Networks like Marie Stopes International and Population Services International have expanded reproductive health coverage in underserved regions of Sub-Saharan Africa and South Asia, illustrating how private initiatives can balance efficiency and equity (Thurston et al., 2015; Munroe et al., 2015). Similarly, evidence from clinical social franchising models operating in low- and middle-income countries shows potential for increasing service utilisation and improving certain dimensions of health service quality (Beyeler et al., 2013). Such interventions have the potential to improve health outcomes and long-term economic prospects for disadvantaged communities, ultimately reducing inequality.

54 Rwanda's Mutuelle de Santé is a community-based health insurance scheme, funded by affordable premiums and government subsidies, that allows members to access public and accredited private providers at minimal cost. Key success factors include mandatory enrolment, income-based premium subsidies, performance-based financing, and robust oversight. Ghana's NHIS integrates public financing (tax revenues, VAT levy, social security contributions) with a comprehensive accreditation system for private and public health facilities. This allows members, particularly the poor and vulnerable, who receive payment exemptions, to access affordable healthcare from a wide network of providers, reducing out-of-pocket expenses (Lagomarsino et al., 2012; Saksena et al., 2011; Wang et al., 2017).

The health-focused projects listed below, which fall under the Global Gateway umbrella, offer opportunities for applying this guidance. This can enhance their contribution to reducing inequalities, through ensuring better health access, stronger service delivery, and inclusive innovation.

AFRICA
MAV+ (Manufacturing and Access to Vaccines), Digital Health.

ASIA AND THE PACIFIC
Darkhan City's Energy-Efficient Hospital, One Health Cambodia.

LATIN AMERICA AND THE CARIBBEAN
Health Resilience and Vaccine Production, Pharma Manufacturing (Costa Rica).

EASTERN NEIGHBOURHOOD
Balti Regional Hospital.

SOUTHERN NEIGHBOURHOOD
Healthcare Investment (Egypt).

WESTERN BALKANS AND TÜRKIYE
University Children's Hospital Tiršova2.

Source: European Commission, 'Global Gateway flagship projects'.

In sum, while healthcare provision has traditionally been a public responsibility, realities in developing contexts call for strategic private sector engagement. Properly harnessed, private sector involvement can significantly advance universal health coverage and reduce inequalities.

3.5. Education

Education plays a pivotal role in shaping inequality. Working as both a driver of inequality and a remedy for it, education can entrench disadvantage when access to it is unequal, but it also offers one of the most powerful pathways to breaking intergenerational poverty (Oxfam, 2019).

Unequal access to quality education reinforces disparities in skills, employment opportunities, and incomes. Wealthier families often benefit from high-quality private education and supplementary tutoring, while poorer households rely on underfunded public schools or remove children early from school to contribute to household income. In rural and remote areas, shortages of schools and qualified teachers further exacerbate these disparities. These long-term educational disparities entrench social stratification, as illustrated by Latin America's historical experience, where unequal access to education played a significant role in sustaining persistent income inequalities (Lopez-Calva & Lustig, 2010; Lustig et al., 2013, 2016; Tsounta & Osueke, 2014).

Conversely, education has the capacity to drive social mobility and boost private sector development. A well-educated workforce attracts private investment beyond low-wage industries. Improved transport connectivity (discussed in Subsection 3.3) reduces geographic barriers to education, while enhanced health outcomes (discussed in Subsection 3.4) positively affect educational participation and performance, having direct implications for employment and income levels. Empirical evidence shows that each additional year of schooling increases individual earnings by about 10 percent (Psacharopoulos & Patrinos, 2004), and that nearly half of global poverty reduction since 1980 is attributable to educational expansion (Gethin, 2023).

The private sector plays an increasingly important role in addressing these disparities, particularly in contexts where public education systems are under strain. Private schools, vocational institutes, and ed-tech companies are expanding access, improving quality, and driving innovation in both pedagogy and delivery. For instance, vocational training programmes aligned with industry needs help equip disadvantaged youth with market-relevant skills, directly improving their employment prospects. Digital platforms and mobile learning solutions democratise access to high-quality content that was previously restricted to urban elites. Khan Academy, an ed-tech platform offering free online instructional videos and interactive exercises,

has been successfully integrated into schools in Chile and Brazil, improving student engagement, confidence, and independent learning, particularly when supported by adequate infrastructure and trained teachers (see Box 3.5.A). Similarly, Bridge International Academies in Kenya use centrally developed lesson plans delivered via tablets to teachers, accompanied by rigorous monitoring and structured pedagogical support. This model has been found to improve primary school test scores significantly, equivalent to an additional 0.89 years of Kenyan schooling compared to pupils enrolled in other schools (Gray-Lobe et al., 2022). During the COVID-19 pandemic, ed-tech models proved their value in maintaining continuity of learning, but also revealed sharp digital divides, as students without reliable internet or devices were excluded.

Box 3.5.A: Khan Academy (Chile and Brazil)

Khan Academy, an ed-tech platform offering free online instructional videos and interactive exercises, is now integrated into classrooms across Chile and Brazil, particularly for mathematics education. The platform allows students to progress at their own pace, receive immediate feedback, and engage with unlimited practice problems, enhancing student motivation, confidence, and engagement through interactive learning and gamification. Evaluations in both countries have revealed modest yet meaningful benefits, particularly in fostering positive attitudes towards learning, even though direct impacts on standardised test scores were found to be limited.

Khan Academy specifically contributes to reducing educational inequalities by increasing the accessibility of high-quality learning resources, especially for underserved or low-income students. Khan Academy's platform includes features designed to support learners with disabilities, including those with low vision or colour blindness and learners who are deaf or hard of hearing. These features encompass screen reader compatibility, adjustable text size, colour contrast and visual adjustments, transcripts and subtitles, and keyboard navigation, significantly enhancing accessibility for students with diverse learning needs.

In Chile, the platform was strategically introduced in schools predominantly serving low-income communities, enabling these students to engage with mathematics independently and at their own pace. Similarly, in Brazil, it has proved particularly beneficial for students with diverse learning needs or limited access to educational materials. However, effectiveness varies depending on technological infrastructure and the level of home access to digital devices, and has been found to be reduced in cases where there is insufficient teacher training and difficulties aligning the platform with national curricula and standardised testing frameworks—underscoring its role as a supplementary, rather than replacement, educational tool.

The implementation of Khan Academy in both Chile and Brazil depends on several **enabling conditions**:

1. Reliable technological infrastructure—particularly internet connectivity and the availability of digital devices—is crucial. Schools that are adequately equipped with these resources experience more significant positive outcomes, while those lacking infrastructure face notable challenges.
2. Equally important is teacher training and pedagogical support. Educators require guidance to integrate Khan Academy effectively within existing curricula, ensuring the platform complements rather than complicates their teaching practices.
3. Additionally, extended periods of implementation allow schools and students to adapt and fully integrate digital learning into regular instructional practices, reinforcing the platform's value as a supplementary resource that complements traditional teaching.

Overall, Khan Academy has demonstrated potential as a valuable supplementary educational tool in Chile and Brazil, effectively enhancing student engagement and promoting equitable access to quality mathematics education. To achieve greater impact, addressing structural challenges such as infrastructure limitations, teacher preparedness, and curricular alignment through complementary government and institutional interventions is essential.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Expanded access to high-quality educational resources for low-income students (direct).
- Increased student engagement, motivation, and confidence (indirect).
- Reduced educational disparities through supplementary digital resources, including assistive learning technologies (direct and indirect).

ENABLING CONDITIONS:

- Reliable technological infrastructure.
- Teacher training and pedagogical integration support.
- Adequate implementation duration for successful adoption.
- Blended pedagogical approaches combining digital and traditional methods, and alignment with national curricula.

Sources: Based on Ferman et al. (2019), Fundação Lemann and Khan Academy (2018), Light and Pierson (2014a; 2014b), Tenório et al. (2018), and www.khanacademy.org.

Private sector engagement in education cannot be left to the market alone. Without robust oversight and appropriate inclusive measures, it risks exacerbating inequality, as quality private schools and online platforms become accessible primarily to affluent students (UNESCO, 2021). Therefore, leveraging private sector engagement to effectively reduce inequality requires targeted mechanisms to ensure equitable access and quality simultaneously.

Firstly, **balancing efficiency and inclusiveness in private education requires robust oversight** (UNESCO, 2021). Equity-focused regulations, transparent admissions practices, and rigorous accreditation standards are essential to prevent exclusionary practices favouring wealthier students and to ensure private institutions meaningfully enhance both educational quality and equitable access. Moreover, strategically structured non-formal educational initiatives—implemented by private sector providers, NGOs, or social enterprises—can further address educational inequalities among marginalised groups, such as refugees, working children, or girls who are unable to attend traditional schools. These initiatives include accelerated learning programmes for out-of-school youth, vocational and skills-based training, community-based literacy classes, refugee education programmes, and mobile or distance-learning solutions targeting remote or conflict-affected communities (UNESCO, 2021; Inter-agency Network for Education in Emergencies, 2021).

Secondly, while private sector engagement may stimulate beneficial competition, incentivising public institutions to enhance their quality standards, empirical evidence on such competition effects remains mixed and highly context-dependent (Andrabi et al., 2017; Hsieh & Urquiola, 2006; Figlio & Hart, 2014; Bettinger, 2005). **Without deliberate inclusive measures, competitive pressures alone are unlikely to significantly benefit disadvantaged students.** To this end, subsidies, scholarships, conditional grants, financial aid, and vouchers can enhance the affordability of private education, thereby expanding access for disadvantaged learners. For example, Chile's reforms allowing government scholarships at accredited private universities expanded low-income enrolments (Espinoza et al., 2024; Johnson, 2023). Similarly, India's affirmative action policies in premier engineering institutes and Brazil's ProUni programme explicitly facilitate disadvantaged students' entry into private higher education, improving their employment prospects and income mobility (Bagde et al., 2016; Bertrand et al., 2010; Schneider et al., 2021). While low-cost private schools in lower-income areas have expanded rapidly, even minimal fees can remain a burden for the poorest families, and educational quality varies considerably. Targeted voucher schemes or conditional grants tied explicitly to quality standards can enhance these schools' effectiveness.

Similarly, **charter or concession schools**—publicly funded yet privately managed—can potentially deliver innovation and quality improvements, provided they are supported by rigorous oversight and equitable regulatory frameworks[55]. Experiences from Chile, Colombia, and the United States illustrate this complexity: charter and concession schools have demonstrated higher student performance and expanded educational access in certain contexts, but broader evidence on their effectiveness and equity impacts remains mixed, being significantly dependent on regulatory quality, equitable admissions policies, and local governance (Angrist et al., 2013; Center for Research on Education Outcomes, 2013; Termes et al., 2015; Valenzuela et al., 2013). Ultimately, while PPPs can enhance access and reduce costs for education, particularly at pre-primary and secondary levels, their success remains context-specific and critically reliant upon robust governance, transparent regulatory frameworks, and equitable contract management, to avoid inadvertently widening inequalities (Crawfurd et al., 2024).

Finally, **ensuring that curricula are consistent across private and public institutions, and are aligned with labour market opportunities, is essential to avoid exacerbating socioeconomic divides.** Strategic partnerships that align vocational training with labour market demands enable disadvantaged students to gain practical, employable skills, improving employment outcomes and thus reducing inequalities (Kluve et al., 2019; Card et al., 2018). For instance, Mexico's Youth Building the Future Programme integrates vocational training and practical industry experience through targeted PPPs (see Box 3.5.B). The programme pairs vulnerable youth with private enterprises, providing hands-on training, mentoring, monthly stipends, and health insurance. Upon completion, participants either secure direct employment or benefit from enhanced employability in broader labour markets (UNESCAP, 2021). Similarly, Peru's Productive Youth programme offers free accredited training, combined with internships, improving employability among low-income youths[56]. Successful international examples, such as the vocational training systems in Switzerland and Germany, demonstrate how aligning vocational training closely with private sector expertise and public support maximises inclusive participation and equitable outcomes (Hoeckel & Schwartz, 2010; Hoffman & Schwartz, 2015).

Private sector corporate social responsibility initiatives further complement these approaches, offering targeted scholarships, mentorship, or internship programmes designed specifically for marginalised groups, such as sponsoring girls' participation in science, technology, engineering and mathematics (STEM) education or providing internships to economically disadvantaged students. While these initiatives typically reach small cohorts, they help build broader social awareness and enhance human capital among underserved populations.

55 Charter schools are independently operated, publicly funded institutions that are granted a high level of autonomy in exchange for accountability in regard to meeting defined performance criteria. Concession schools involve the government contracting private providers to manage publicly funded schools, often under performance-based agreements that specify educational outcomes, enrolment policies, and quality standards (Patrinos et al., 2009).

56 For further details, see Peru's Ministry of Labour and Employment Promotion 'Jóvenes Productivos'. (Productive Youth).

Box 3.5.B: Youth Building the Future Programme (Mexico)

Mexico's Youth Building the Future Programme (*Jóvenes Construyendo el Futuro*) (JCF), launched in 2019, aims to address high youth unemployment and limited educational opportunities among young people aged 18–29, particularly those categorised as NEET (not in education, employment, or training), who constitute 22 percent of the youth population. Using an innovative PPP approach, JCF provides vulnerable youth with year-long, hands-on vocational training and mentoring by placing them directly into workplaces with participating businesses, NGOs, and government institutions. Participants receive a monthly stipend and health insurance, representing a comprehensive social inclusion strategy that goes beyond a conventional cash-transfer programme. By early 2025, around 2.3 million young people had been enrolled, with over 200,000 enterprises participating as training centres.

JCF aims to significantly reduce socioeconomic and educational inequalities by bridging the education-to-employment gap through providing structured and experiential learning. Unlike rigid traditional educational models, the programme allows young people to select training paths aligned with their interests, goals, skills and geographic locations, leading to high engagement and completion rates. JCF explicitly targets marginalised groups, such as young women in unpaid domestic roles[57], indigenous youth, and residents of high-poverty and high-crime areas. Additionally, by providing economic support, JCF addresses the root causes of youth crime and social exclusion, fostering positive social behaviours and improving participants' psychological well-being, self-confidence, and long-term employment prospects. When their participation in the programme ends, trainees may be hired by the company they trained under or apply for other jobs, leveraging the skills they have gained through their participation in JCF.

Several **enabling factors** underpin the programme's impact:

1. Strong public–private collaboration enables wide implementation across diverse sectors, effectively matching participant interests with labour market needs
2. Sustained government commitment ensures stable funding for stipends and health insurance—although budgetary challenges need careful management.
3. JCF also demonstrated flexibility during the COVID-19 pandemic by quickly shifting to virtual training platforms, enabling uninterrupted skill development.
4. Recognising Mexico's substantial informal economy, JCF deliberately integrates SMEs and informal businesses, increasing its accessibility and relevance to local labour markets.

Nevertheless, JCF faces some challenges, including insufficient strategies for post-programme employment transitions, limited inclusion of disabled youth, gender biases, and financial sustainability concerns. Policy refinements are needed to consolidate JCF as a sustained model for youth employment integration.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Reduced youth unemployment through structured vocational training (direct).
- Increased employment opportunities for marginalised groups (direct).
- Improved psychological well-being and social inclusion (indirect).
- Enhanced gender equality and inclusion in labour markets (direct and indirect).

ENABLING CONDITIONS:

- Strong public–private collaboration, ensuring relevant vocational placements.
- Sustained government commitment, in the form of financial and social protection schemes.
- Adaptability in the face of disruptions (e.g., COVID-19 pandemic), via flexible virtual training.
- Explicit inclusion of the informal sector and SMEs in programme frameworks.

Sources: Based on Cervantes-Gómez et al. (2023), Mora-Salas and Cortes (2021), UNESCAP (2021), UNDESA (2024), and Mexico's Programs for Well-being (Programas para el bienestar).

57 Women represent a significant portion of JCF beneficiaries (approximately 60 percent), revealing prevailing gender disparities in the labour market. This contributes to greater inclusion of women in traditionally male-dominated industries.

Limitations, which range from the risk of prioritising profitability over equity, to inadequate coverage in low-income or remote areas, and the potential for variable quality without oversight, highlight why private sector engagement alone cannot guarantee inclusive education outcomes. **Public sector leadership is therefore decisive not only to regulate and guide private initiatives, but also to enable them, through strategic investment and partnerships.**

Ambitious policy frameworks significantly enhance the impact of private sector educational innovation. For instance, India's National Education Policy 2020 exemplifies this approach by promoting digital integration in classrooms, encouraging PPPs, and reducing regulatory barriers for startups, to stimulate innovation (Government of India, 2020). Two notable Indian initiatives illustrate how such an enabling environment can foster impactful solutions. The ed-tech startup Doubtnut addresses educational gaps by providing instant video solutions to student queries in mathematics and science via accessible mobile and web applications. Similarly, Pratham's tablet-based literacy programme improves foundational literacy and numeracy among rural children through interactive digital content, community engagement, and comprehensive teacher training[58].

Public investment can also act as a powerful enabler of private sector solutions, crowding in resources and improving delivery at scale. The Giga Initiative, a PPP launched by UNICEF and the International Telecommunication Union (ITU), exemplifies this approach. By connecting schools in underserved areas to the internet, Giga transforms them into digital community hubs, enhancing digital inclusion and education equity. In Rwanda, Giga-supported investments in broadband infrastructure significantly reduced school connectivity costs while catalysing private sector investment, showing how public action can unlock broader innovation and market participation (see Box 3.5.C).

Box 3.5.C: Giga Initiative (with a focus on Latin America and the Caribbean)

Giga is a global PPP launched by UNICEF and ITU in 2019 with the aim of connecting every school to the internet and every young person to information, opportunity, and choice. Its regional implementation in Latin America and the Caribbean involves collaboration with the Organisation of Eastern Caribbean States (OECS) and operates in countries including El Salvador, Honduras, and Eastern Caribbean States. Giga addresses a critical barrier to educational equity, lack of reliable internet connectivity and digital infrastructure, by transforming schools into connectivity hubs for local communities and extending internet access to underserved and remote areas. It supports governments by providing capacity building, policy and regulatory guidance, innovative financing solutions, real-time mapping of connectivity status, and discounted digital education resources to scale digital learning and content access.

Globally, Giga has achieved significant impacts by enhancing governments' capabilities in connectivity mapping, procurement transparency, and financing efficiency. For example, in Kyrgyzstan, Giga helped reduce the government's education connectivity budget by 40 percent. In Niger, Giga's advanced algorithms and AI identified thousands of previously unmapped schools, significantly enhancing education planning capabilities. Additionally, Rwanda saw private sector investment increase following Giga-supported improvements in broadband infrastructure, resulting in substantial cost reductions for school connectivity.

Several **enabling conditions** underpin Giga's effectiveness in the region:

1. Strong PPPs mobilise resources, negotiate reduced broadband costs, and facilitate infrastructure implementation.
2. Robust government support, including clear regulatory frameworks and aligned educational policies, further enhances the scalability and effectiveness of digital integration into national education systems.
3. Long-term financial sustainability, through international donor and corporate partnerships, is essential for continued expansion and maintenance of connectivity.
4. Infrastructure readiness—reliable electricity supply, availability of digital devices, and teacher training—is also crucial to fully integrate digital learning in classrooms.

58 For further details, see www.doubtnut.com and the Pratham digital initiatives in www.pratham.org.

5. Lastly, active community engagement ensures the initiative's local relevance, acceptance, and sustainability, particularly in the Latin America and the Caribbean region, where digital exclusion exacerbates existing inequalities.

To summarise:

DIRECT AND INDIRECT IMPACTS ON INEQUALITIES:

- Enhanced internet connectivity and digital access for underserved communities (direct).
- Improved educational equity through digital learning opportunities (direct and indirect).
- Increased digital literacy and economic preparedness (indirect).
- Broader community benefits from improved local digital infrastructure (indirect).

ENABLING CONDITIONS:

- Aid coordination involving a multi-stakeholder approach.
- Robust PPPs that mobilise resources and reduce costs.
- Strong governmental regulatory support and aligned educational policies.
- Sustainable financial structures through international and corporate partnerships.
- Infrastructure readiness, including electricity, internet, and digital devices.
- Active community engagement, ensuring local support and sustainability of the initiative.

Sources: Based on Castillo-Canales et al. (2023), Fort and Haniya (2023), and UNICEF (n.d.).

As the above case studies demonstrate, private sector engagement can enhance education equity when it is embedded within appropriate safeguards and public priorities. However, this impact is not automatic: it hinges on a set of enabling conditions that ensure access, affordability, and quality for all, especially for the most disadvantaged learners.

Key enabling conditions for inclusive investments in education:

- **Robust regulation and quality assurance:** Accreditation standards, regular monitoring, and accountability measures, ensuring equitable, high-quality private education and preventing exploitative practices.
- **Inclusive educational national policies**: Explicit national strategies that address gender, disability/special learning needs, and geographic, ethnic, and socioeconomic disparities, supported by outreach programmes, quotas, and enrolment incentives.
- **Strategic PPPs, supported by ambitious national policies:** Clearly structured partnerships targeting underserved populations, with transparent admissions criteria and performance-based accountability to achieve equity objectives. Strong PPPs can mobilise resources, negotiate reduced broadband costs, and facilitate infrastructure implementation.
- For digital education, **reliable technological infrastructure**, particularly internet connectivity and the availability of digital devices.
- **Curriculum consistency and relevance aligned with labour market opportunities:** Alignment between public and private curricula, incorporating private sector innovations while ensuring equitable outcomes.
- **Community engagement** to ensure local relevance, acceptance, and sustainability.

Strategic guidance is needed to ensure that Global Gateway's education investments translate into equitable outcomes. Drawing on the lessons from the initiatives discussed above, the recommendations below identify practical ways to shape inclusive partnerships and innovative solutions within the education pillar.

Strategic guidance for Global Gateway's education pillar

DO'S

- **Explicitly target disadvantaged groups** (low-income and rural populations, girls, ethnic minorities, children with disabilities) through scholarships, targeted internships programmes, conditional grants, vouchers, outreach initiatives, and rural school adoption programmes or branches.
- **Prioritise equitable financing mechanisms:** Targeted subsidies, blended finance, and conditional cash transfers, enabling affordable access to private education for low-income students.
- **Actively address gender, disability, geographic, and ethnic disparities via targeted programmes** (e.g., stipends for rural girls, assistive learning technology, affirmative action, pedagogical support, teacher training), enhancing educational outcomes and socioeconomic equity.
- **Encourage social protection policies,** combined with education strategies that include school feeding programmes, child grants, scholarships, or transfers, combined with active labour market policies to smooth the transition from education to employment.
- **Foster vocational training** that is closely aligned with industry needs to improve employability among disadvantaged youth. Comprehensive programmes targeting entrepreneurs of SMEs, combining access to finance, skills training, and integration into supply chains, can be particularly impactful, notably by helping informal businesses to formalise, grow, and stabilise (Banerjee et al., 2015; Cho & Honorati, 2014)[59].

DON'TS

- **Avoid expanding private education in the absence of clear regulatory frameworks**, which risks increasing inequalities due to variable quality, high fees, or exploitative practices.

  > *For instance, Chile's initial implementation of the school voucher system in the 1980s illustrates how inadequately regulated private sector involvement can inadvertently deepen inequalities. Despite intentions to enhance educational choice, the absence of robust regulatory oversight led better-funded private schools to selectively admit higher-performing, wealthier students, while public schools predominantly served lower-income students, intensifying socioeconomic stratification (Hsieh & Urquiola, 2006; Bellei, 2009; OECD, 2017b). This contrasts with more recent reforms—such as government scholarships for accredited private universities—which, as noted, have broadened equitable access (Espinoza et al., 2024; Johnson, 2023).*

- **Prevent excessive reliance on tuition or user fees**, which can disproportionately exclude low-income or marginalised students.
- **Do not allow significant disparities in curricular standards or quality between public and private systems:** Introduce national learning benchmarks, harmonise curricula, and require private institutions to meet minimum quality indicators to ensure all students, regardless of school type, achieve comparable educational outcomes.
- **Prohibit selective admissions** that disproportionately favour wealthier students: Enforce inclusive enrolment policies in publicly supported private schools and mandate transparency in selection criteria, while incentivising diversity through funding that is tied to equitable access and representation.

59 Notable microfinance and financial innovation initiatives in Sub-Saharan Africa, such as MicroLoan Foundation, Letshego, Opportunity International, and Pula's microinsurance, demonstrate the potential of targeted financial support for SMEs.

These guiding principles can inform the implementation of the following Global Gateway projects.

Education: selected Global Gateway projects, per region

AFRICA
Regional Teachers Initiative for Africa (RTIA), VET Toolbox 2.

ASIA AND THE PACIFIC
Quality Education for All, Skills for Tourism, Agriculture and Forestry (STAF).

LATIN AMERICA AND THE CARIBBEAN
Technical and Vocational Education and Training (TVET) Initiatives, Social Cohesion..

EASTERN NEIGHBOURHOOD
Rebuilding Future and Hope (Ukraine).

Source: European Commission, 'Global Gateway flagship projects'.

In sum, education serves as a pivotal lever for reducing inequalities, enhancing employability, and fostering inclusive socioeconomic progress. Strategic private sector engagement through digital education platforms, vocational training partnerships, and targeted digital innovations can significantly expand educational access, enhance learning outcomes, and address critical educational gaps, particularly for underserved populations. However, maximising equity impacts demands strong alignment with public educational objectives, prioritisation of equitable access, robust supporting infrastructure, and proactive strategies that address persistent gender, disability, socioeconomic, and geographic disparities. Carefully structured PPPs must explicitly embed equity considerations to achieve sustainable and inclusive educational advancement.

Across the case studies presented in this section, an inherent **tension emerges between private sector objectives—such as efficiency, profitability, and risk management—and public sector goals of equity, affordability, and universal access.** Effectively addressing this tension requires carefully designed mechanisms within public–private engagements. For example, in Panama City's transport sector, the MiBus PPP established standardised fares and transparent routes to ensure affordability and accessibility, especially benefiting lower-income commuters who had previously been served by informal transport systems (Box 3.3.A). In Ghana's healthcare sector, the Zipline initiative leveraged government support and subsidies to provide affordable drone delivery of medical supplies to underserved rural populations, directly mitigating geographical healthcare inequalities (Box 3.4.B). In education, the Giga Initiative explicitly used innovative financing solutions and public–private collaboration to extend internet connectivity and digital educational resources into underserved areas, reducing digital and educational divides (Box 3.5.C). Each of these cases highlights practical strategies—such as targeted subsidies, robust governmental backing, transparent regulation, and explicit partnerships—which are essential for aligning private sector incentives with broader equity objectives, thus preventing the exacerbation of inequalities through private sector involvement.

Across the five Global Gateway pillars—digital, energy/climate change, transport, health, and education/research—private sector engagement therefore emerges, under the right conditions, as a powerful catalyst for reducing inequalities. However, fully leveraging this potential critically depends on broader socioeconomic and institutional contexts, including factors like gender equity, disability/special learning needs, regional disparities, minority inclusion, governance quality, and political stability. Understanding how these underlying conditions shape the interactions between inequality reduction and private sector outcomes, as explored in the following section, is essential for sustaining inclusive and equitable development.

4. The role of socioeconomic and institutional factors

The interplay between inequality and private sector development is significantly shaped by socioeconomic and institutional conditions that influence opportunities, incentives, and outcomes within societies. Human capital foundations—through education, healthcare access, social protection systems, and other policies that facilitate social mobility—can maximise the private sector's capacity to contribute to reducing inequalities. Simultaneously, pre-existing disparities related to gender, disability, regional divides, and minority inclusion influence economic participation and the equitable distribution of private sector benefits. Additionally, macroeconomic and political stability, the quality of governance, regulatory effectiveness, and corruption control critically shape business environments, determining whether inclusive growth cycles emerge or inequality deepens. This section explores these socioeconomic and institutional dimensions, highlighting conditions under which positive synergies between inequality reduction and private sector growth flourish, and those under which disparities obstruct both equity and enterprise.

4.1. Social factors enabling private sector-driven inequality reduction

As seen in Section 3, **education** significantly enables the private sector to reduce inequality effectively. Broad and equitable access to quality education equips diverse populations with the skills necessary to participate fully in economic opportunities. A well-educated workforce attracts private investment beyond low-wage industries, facilitating economic advancement along the value chain and ensuring that growth benefits disadvantaged groups. Indeed, economies prosper when populations are well-educated (Spatafora, 2021). Conversely, unequal educational systems perpetuate inequalities by restricting access to quality employment primarily to privileged groups, thus entrenching socioeconomic disparities.

Health and nutrition also critically enable private sector-driven inequality reduction. Healthy populations enhance workforce productivity and innovation, whereas poor health disproportionately limits the capabilities of lower-income groups, reinforcing inequality. Accessible healthcare significantly reduces these disparities by improving workforce productivity and cognitive development among disadvantaged populations (WHO & World Bank, 2017). Early-life health interventions notably result in higher adult earnings and cognitive outcomes, reinforcing the economic foundations that are essential for sustained growth and inequality reduction (Smith, 2009; Lundborg et al., 2014). Countries that invest in universal healthcare or comprehensive health insurance also reduce inequalities, by fostering economic stability and creating conditions that are favourable for inclusive private sector growth.

Effective social protection systems, including both non-contributory and contributory social protection schemes, are key to ensuring that private sector activity contributes to inequality reduction. Social protection is redistributive in nature, reducing income inequality and contributing to ensuring equitable access to social services for increased equality of opportunities (Lustig, 2016; Razavi et al., 2024). It also maintains household consumption stability during economic downturns, indirectly benefiting businesses by sustaining consumer demand. Social protection programmes like conditional cash transfers notably impact economic behaviours, foster human capital accumulation, and increase household consumption (Banerjee & Duflo, 2007; Fiszbein & Schady, 2009; Rawlings & Rubio, 2005), thereby supporting economic dynamism. At the same time, an effective legal framework for social security, with adequate enforcement mechanisms, ensures that private businesses provide decent jobs, with access to social security (contributory social protection) for workers and their families. This kind of protection prevents people from falling into poverty because of life's contingencies, such as losing a job, having a job-related accident, acquiring a disability, having a child, or reaching old age.

Moreover, social protection can serve as a strategic policy tool that can be intentionally designed to shape inclusive private sector outcomes. Different forms of social protection—including universal basic services (such as healthcare), unemployment insurance schemes, affordable childcare support, targeted conditional or unconditional cash transfers, and vouchers—can actively support equitable private sector growth by boosting human capital, stabilising household consumption, and facilitating economic participation among disadvantaged groups. For instance, digital cash-for-connectivity programmes can bridge digital divides, energy vouchers or compensation schemes can facilitate just energy transitions, and health vouchers can enable low-income groups to access private healthcare. Adaptive and shock-responsive social protection systems are particularly crucial in contexts characterised by instability or climate risks, providing rapid,

targeted support to vulnerable populations, thus safeguarding inclusive economic growth and market stability (Bowen et al., 2020). Leveraging these strategic complementarities between public social protection and private sector capabilities significantly enhances resilience, equity, and sustainable development.

Robust **social mobility mechanisms** are similarly critical, as they ensure talent utilisation, regardless of socioeconomic background, enhancing economic productivity and market stability. For instance, equitable asset access through microfinance programmes and SME financing expands entrepreneurial opportunities for disadvantaged groups, directly enabling broader economic participation and improved income equality. Progressive taxation and redistributive public spending, including through social protection transfers, further support mobility by funding essential services that disproportionately benefit lower-income populations (Causa & Hermansen, 2017).

Overall, education, healthcare, social protection, and mobility mechanisms collectively establish robust human capital foundations, reduce inequality, and facilitate inclusive private sector-led growth. This synergy creates a reinforcing cycle wherein enhanced human capital drives productivity, broad-based consumer demand, and equitable socioeconomic outcomes.

4.2. Influence of specific horizontal inequalities on private sector contributions

Reducing inequalities related to gender, regional disparities, and minority inclusion, such as disability or migration status, significantly expands labour and consumer markets. Addressing these barriers enriches labour markets by providing diverse talent, boosts household purchasing power, and stimulates aggregate demand and business growth.

Gender inequality notably restricts economic potential, with estimates suggesting that closing gender gaps could boost GDP by up to 35 percent in countries with low female labour participation (Dabla-Norris & Kochhar, 2019; Ostry et al., 2018). Empowering women through education, inclusive hiring practices, equal employment opportunities, entrepreneurship programmes that target women, support for women-owned enterprises, financial inclusion, and strengthened legal rights (property ownership, inheritance) generates multiplier effects, improving health, education, and household incomes. Such empowerment effectively doubles the potential workforce and entrepreneurial base, directly enhancing private sector development. In agriculture, equalising women's access to productive inputs (credit, land) increases yields and food security (FAO, 2011). Asia's manufacturing expansion, involving millions of rural women, illustrates the transformative potential of gender inclusion in regard to reshaping income distribution and social norms (Duong et al., 2024). While ensuring decent employment conditions remains challenging, the inequality-reducing impact is clear. Companies with higher gender diversity, particularly in leadership positions, often achieve superior performance (Aspen Network of Development Entrepreneurs, 2024; McKinsey & Company, 2020).

Regional inequalities similarly restrict national growth by leaving substantial human and natural resources underutilised. Investments are typically concentrated in already-developed areas, which intensifies spatial disparities. Deliberate public interventions—such as infrastructure development (roads, energy, digital connectivity), special economic zones[60], human capital investments, and decentralisation policies—are essential to integrate historically marginalised regions into national economies. China's 'Go West' policy exemplifies how targeted public investments can effectively reduce regional disparities, creating new private sector opportunities (Fan & Sun, 2008). Likewise, evidence from Latin America shows that improved infrastructure enhances growth and reduces income inequality (Calderón & Servén, 2004). Proactively managing rural-to-urban migration through housing and social integration further maximises migration's economic benefits, while preventing urban exclusion. Reducing regional disparities thus expands markets, alleviates urban congestion, and enables businesses to develop new supply chains and consumer bases.

60 Special economic zones (SEZs) are geographically defined areas designated by governments that typically offer favourable regulatory frameworks, tax incentives, streamlined administrative procedures, and enhanced infrastructure to attract private investment. The primary objectives of SEZs include stimulating economic growth, generating employment, and facilitating technology transfer, particularly in less developed or historically marginalised regions (e.g., Farole, 2011; Wong & Buba, 2017).

Including minority and marginalised groups—ethnic, disability racial, religious, or indigenous—is equally crucial, as historical exclusion perpetuates inequalities and restricts economic potential. Effective inclusion policies, such as anti-discrimination laws, affirmative action[61], equitable land rights and recruitment practices, and targeted entrepreneurial support, unlock human capital, mitigate social tensions, and foster stability. Malaysia's affirmative action for ethnic Malays (*bumiputera*), incorporating educational quotas and business ownership targets, successfully narrowed ethnic economic disparities, promoting social cohesion and sustained growth (Lee, 2021). From a private sector viewpoint, embracing diversity enhances innovation and market understanding, and broadens consumer and labour segments, while mitigating instability risks linked to exclusion. While some may perceive inclusion as involving a trade-off with efficiency, growing evidence shows that inclusive companies often outperform their peers in profitability, innovation, and resilience. For instance, firms that actively integrate persons with disabilities report higher revenue and market value growth (Accenture, Disability:IN & American Association of People with Disabilities, 2018; Return on Disability Group, 2023)[62].

In sum, addressing gender gaps, regional disparities, and exclusion of minorities strengthens private sector contributions to inclusive economic development. These targeted efforts harness previously excluded groups' potential, driving innovation, expanding markets, and fostering the stability necessary for sustained private sector growth.

4.3. Economic factors

Stable macroeconomic environments, characterised by low inflation, sustainable fiscal policies, and steady growth, are fundamental to inequality reduction, as they lower uncertainty, encourage long-term investment, and preserve the economic benefits of reduced inequality (Bloom et al., 2007; IMF, 2021; World Bank, 2005)[63]. Competitive, open market environments amplify the gains from inequality reduction by boosting consumer demand, preventing monopolistic practices, and promoting equitable market participation, especially for businesses started by previously marginalised groups. Indeed, competition policies prevent monopolistic practices, improving market access and lowering prices, which benefits lower-income consumers, as demonstrated in competitive telecom sectors (World Bank, 2016b). Financial regulations that promote inclusion (e.g., mobile money) reduce inequalities linked to financial exclusion (Demirgüç-Kunt et al., 2018).

High-quality regulation, characterised by clear rules, simplified business procedures, and robust anti-trust enforcement, is essential for sustaining private sector growth and inclusive economic outcomes, and for ensuring that the benefits of growth are distributed equally (Baker & Salop, 2015; Impullitti & Rendahl, 2025; World Bank, 2019b). Additionally, **progressive fiscal policies and effective public investment,** including enhanced tax progressivity and targeted social spending, foster inclusive growth by funding essential public services, infrastructure, and human capital development (Aiyar & Ebeke, 2019; Lustig, 2018), mitigating inequalities[64]. **Fair labour market conditions and regulations**—including adequate minimum wages, aligned with productivity growth, safe working conditions collective bargaining rights, and anti-discriminatory practices—ensure equitable wage growth, enhance productivity, and foster sustained economic inclusion (Economic Policy Institute, 2024; Cazes et al., 2012; Mishel & Bivens, 2021)[65]. Brazil's experience in the 2000s illustrates how higher minimum wages and strengthened labour rights can contribute significantly to inequality reduction (Lustig et al., 2013; Paes de Barros et al., 2007).

61 Affirmative action refers to targeted policies and measures designed to improve opportunities for historically disadvantaged groups who have faced systemic exclusion or discrimination based on race, ethnicity, gender, disability, or socioeconomic background. These measures typically include quotas or preferential treatment in education admissions, employment hiring, government contracting, or business ownership, aiming to achieve equitable representation, reduce disparities, and promote inclusive growth (e.g., Holzer & Neumark, 2006).

62 A 2020 Accenture report indicates that companies that excel in disability inclusion see 28 percent higher revenue and 30 percent greater profit margins. The Global Economics of Disability Report (2023) found that companies that invest in disability inclusion outperform their competitors by 10–15 percent in market value growth (Return on Disability Group, 2023).

63 For discussions on how macroeconomic stability is essential for high and sustainable rates of growth (which in turn influence poverty reduction and economic development) and fosters predictable consumption and investment patterns, see Ames et al. (2001) and Le Fort Varela et al. (2020).

64 Another significant policy is reducing tax evasion and excessive tax breaks, as both shift burdens onto others, exacerbating inequality (Alstadsæter et al., 2018; Cobham & Janský, 2018). Resource-rich African countries illustrate how insufficient taxation of profitable mining operations can limit public resources, maintaining high levels of inequality (Moore et al., 2018; UNCTAD, 2020).

65 Aligning wage growth with productivity growth can effectively reduce inequality, enhance economic efficiency, and foster inclusive and sustainable economic development. See, for instance, ILO (2018) and OECD (2018).

4.4. Political and institutional factors

Political stability and institutional quality critically shape the private sector's capacity to reduce inequalities. Stable political environments and transparent, inclusive governance, characterised by **transparent and accountable institutions, clear property rights, effective contract enforcement, low corruption, and equitable market regulation**, directly foster private sector development by reducing uncertainty, lowering transaction costs, and creating predictable investment conditions (DFID, 2013). Such enabling environments attract sustained private investment, particularly in employment-intensive sectors, thus contributing significantly to inequality reduction. Robust institutions also ensure that redistribution occurs effectively, competition remains equitable, and private sector innovation aligns with broader social objectives.

Conversely, weak governance, elite-dominated growth, and political instability—often worsened by high inequality—discourage private investment and frequently trigger social unrest. Such an environment typically restricts private sector growth to enclave industries, limiting broader economic opportunities (see Section 2). Corruption and weak governance can also lead to elite capture and crony capitalism, marginalising SMEs and constraining market dynamism. Effective anti-monopoly laws, transparent governance and procurement systems, and robust anti-corruption frameworks can mitigate these negative dynamics, fostering inclusive market participation (OECD, 2017a). From this perspective, digital technologies, such as AI and blockchain, also hold significant potential for reducing corruption and enhancing governance transparency.

Thus, successful inclusive outcomes require integrated strategies: strengthening institutions, investing broadly in human capital, promoting inclusive governance, and implementing equitable regulatory frameworks. Development cooperation initiatives that leverage private sector engagement should integrate complementary macroeconomic and governance reforms (anti-corruption measures, strengthening of legal frameworks), alongside targeted social initiatives (vocational training, inclusive employment practices), to maximise impacts on inequality reduction and sustainable development.

Section 5. Conclusion

Private sector development and inequality reduction are not competing goals, they are mutually reinforcing when pursued under the right conditions. Inclusive business models, support to SMEs, responsible corporate conduct, and well-designed public policy for universal education and healthcare, equitable infrastructure access, and social protection, can together form the foundation of inclusive growth. *These policies do not only mitigate disparities, they fuel innovation, productivity, and human capital.*

Global Gateway, with its 360-degree approach, provides a unique opportunity for the EU to integrate inequality reduction as a central strategic pillar in its external investments. Private sector engagement can only produce inclusive development outcomes when embedded within an ecosystem that promotes transparency, inclusive regulatory frameworks and public–private collaboration, rights-based governance, and fair service access, while leaving no-one behind.

To operationalise this vision, four actions are critical:

1. **Make inequality a core objective of Global Gateway**: All projects should be designed and monitored through the lens of inequality reduction. This includes systematic use of the Inequality Marker, including for European Fund for Sustainable Development Plus (EFSD+) blending and guarantee operations, and the integration of intersectional analysis to ensure the most marginalised populations are reached. Inequality-reduction indicators should be embedded in ESG and evaluation frameworks, supported by data disaggregated by income group, gender, geography, age, and other relevant dimensions.

2. **Leverage the full potential of the 360-degree approach**: The EU must deploy its blended finance tools, technical assistance, and policy dialogue to create enabling environments that foster inclusive private sector action. This requires combining hard infrastructure with institutional reforms that enhance regulatory fairness, judicial independence, tax equity, and anti-corruption measures. These investments should also be aligned with inclusive growth objectives, focusing on rural development, SME promotion, minimum wage and social protection policies, and the integration of disadvantaged groups into supply chains and labour markets.

3. **Expand strategic partnerships in social sectors**: Global Gateway should actively extend PPPs into areas where state provision is limited or absent, investing in universality. Viability-gap funding, effective oversight, and inclusive regulatory design can make these interventions both impactful and equitable.

4. **Strengthen inclusive governance and participation**: From design to delivery, civil society, local governments, private sector actors, and affected communities should be active partners in shaping investments. This ensures projects are not only technically sound but also socially legitimate and locally anchored.

By positioning inequality reduction as a guiding principle of its external action, the EU can deliver on its global commitments and reinforce its geopolitical positioning as a reliable, rights-based development actor. **Global Gateway is more than a connectivity strategy: it is a strategic platform for transformation. Let it also become a blueprint for equity.**

References

Accenture, Disability:IN & American Association of People with Disabilities. (2018). *Getting to Equal: The Disability Inclusion Advantage*. Accenture.

Abdullah, R., Foster, V., Halpern, J. D., Komives, K., & Wodon, Q. T. (2005). *Water, electricity, and the poor: Who benefits from utility subsidies?* World Bank.

AdVox. (2017). *Free basics in real life: Six case studies on Facebook's internet 'on ramp' initiative from Africa, Asia, and Latin America.* Global Voices Advocacy.

Aggarwal, S. (2018). Do rural roads create pathways out of poverty? Evidence from India. *Journal of Development Economics*, 133, 375–395.

Aghion, P., Akcigit, U., Bergeaud, A., Blundell, R., & Hemous, D. (2019). Innovation and top income inequality. *The Review of Economic Studies*, 87(2), 537–576.

Ahmed, J. U., Gazi, M. A., Iqbal, R., Islam, Q. T., & Talukder, N. (2020). Value co-creation through social innovation in healthcare: A case of WE CARE Solar. *World Journal of Entrepreneurship, Management and Sustainable Development*, 16(4), 341–357.

Aiyar, S., & Ebeke, C. H. (2019). *Inequality of opportunity, inequality of income and economic growth* (IMF Working Paper No. 2019/034). IMF.

Alesina, A., & Perotti, R. (1996). Income distribution, political instability, and investment. *European Economic Review*, 60(6), 1203–1228.

Alesina, A., Ozler, S., Roubini, N., & Swagel, P. (1996). Political instability and economic growth. *Journal of Economic Growth*, 1(2), 189–211.

Allen, L., & Chan, S. (2015). *Solar Sister social impact report: Tanzania & Uganda* (pp. 1–45). Global Social Benefit Fellowship, Santa Clara University.

Almeida, V. (2016). *Rising income inequality, weaker aggregate activity* (BSI Economics Note). BSI Economics.

AlphaBeta. (2017). *Rethinking urban mobility in Indonesia: The role of shared mobility services*. AlphaBeta for Uber.

Alstadsæter, A., Johannesen, N., & Zucman, G. (2018). Who owns the wealth in tax havens? Macro evidence and implications for global inequality. *Journal of Public Economics*, 162, 89–100.

Ames, B., Brown, W., Devarajan, S., & Izquierdo, A. (2001). *Macroeconomic policy and poverty reduction*. IMF and World Bank.

Andrabi, T., Das, J., & Khwaja, A. I. (2017). Report cards: The impact of providing school and child test scores on educational markets. *American Economic Review*, 107(6), 1535–1563.

Angeli, F., & Jaiswal, A. K. (2016). Business model innovation for inclusive health care delivery at the bottom of the pyramid. *Organization & Environment*, 29(4), 486–507.

Angrist, J. D., Pathak, P. A., & Walters, C. R. (2013). Explaining charter school effectiveness. *American Economic Journal: Applied Economics*, 5(4), 1–27.

Asher, S., & Novosad, P. (2020). Rural roads and local economic development. *American Economic Review*, 110(3), 797–823.

Aspen Network of Development Entrepreneurs. (2024, March 8). *Women entrepreneurs: Fueling growth in uncertain times* [blog post].

Ata-Bedu, K. (2018). *A detailed evaluation of Ghana's drone purchase agreement between Fly Zipline Ghana Ltd and the Ministry of Health* (pp. 1–27). IMANI Centre for Policy & Evaluation.

Atiga, O., Tanzubil, B. J., Asaana, J., Ayamba, E. C., Seidu, M. T., & Mohammed, I. (2024). Shortening the last-mile: Impact of Zipline medical drone delivery on the operations of hard-to-reach healthcare facilities in Northern Ghana. *African Journal of Applied Research*, 10(1), 178–200.

Bagde, S., Epple, D., & Taylor, L. (2016). Does affirmative action work? Caste, gender, college quality, and academic success in India. *American Economic Review*, 106(6), 1495–1521.

Bahia, K., Castells, P., Cruz, G., Masaki, T., Pedrós, X., Pfutze, T., Rodríguez-Castelán, C., & Winkler, H. (2024). The welfare effects of mobile broadband internet: Evidence from Nigeria. *Journal of Development Economics*, 170.

Bahia, K., Castells, P., Cruz, G., Masaki, T., Rodríguez-Castelán, C., & Sanfelice, V. (2023). Mobile broadband, poverty, and labor outcomes in Tanzania. *The World Bank Economic Review*, 37(2), 235–256.

Bajar, S., & Rajeev, M. (2016). The impact of infrastructure provisioning on inequality in India: Does the level of development matter? *Journal of Comparative Asian Development*, 15(1), 122–155.

Baker, L., & Phillips, J. (2019). Tensions in the transition: The politics of electricity distribution in South Africa. *Environment and Planning C: Politics and Space, 37*(1), 177–196.

Baker, L., Burton, J., Godinho, C., & Trollip, H. (2015). *The political economy of decarbonisation: Exploring the dynamics of South Africa's electricity sector.* Energy Research Centre, University of Cape Town.

Baker, J. B., & Salop, S. C. (2015). Antitrust, competition policy, and inequality. *Georgetown Law Faculty Publications and Other Works*, 1462.

Banal-Estañol, A., Calzada, J., & Jordana, J. (2017). How to achieve full electrification: Lessons from Latin America. *Energy Policy*, 108, 55–69.

Banerjee, A. V., & Duflo, E. (2007). The Economic Lives of the Poor. *Journal of Economic Perspectives*, 21(1), 141–168

Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2015). The miracle of microfinance? Evidence from a randomized evaluation. *American Economic Journal: Applied Economics*, 7(1), 22–53.

Barrido, G. (2024). *Infrastructure evolution: How the Philippines' PPP code is paving the way*. Lexology.

Bastías, G., Pantoja, T., Leisewitz, T., & Zárate, V. (2008). Health care reform in Chile. *Canadian Medical Association Journal*, 179(12), 1289–1292.

Bellei, C. (2009). The private–public school controversy: The case of Chile. In R. Chakrabarti & P. E. Peterson (Eds.), *School choice international* (pp. 165–192). MIT Press.

Bellemare, M. F., & Lim, S. (2018). In all shapes and colors: Varieties of contract farming. *Applied Economic Perspectives and Policy*, 40(3), 379–401.

Belli, L. (2017). Net neutrality, zero-rating and the Minitelisation of the internet. *Journal of Cyber Policy, 2*(1), 96–122.

Berg, A., & Ostry, J. D. (2017). Inequality and unsustainable growth: Two sides of the same coin? *IMF Economic Review*, 65(4), 792–815.

Berg, A., Ostry, J. D., Tsangarides, C., & Yakhshilikov, Y. (2018). Redistribution, inequality, and growth: New evidence. *Journal of Economic Growth*, 23(3), 259–305.

Bernard, T., & Spielman, D. J. (2009). Reaching the rural poor through rural producer organizations? A study of agricultural marketing cooperatives in Ethiopia. *Food Policy*, 34(1), 60–69.

Bertrand, M., Hanna, R., & Mullainathan, S. (2010). Affirmative action in education: Evidence from engineering college admissions in India. *Journal of Public Economics*, 94(1–2), 16–29.

Bettinger, E. P. (2005). The effect of charter schools on charter students and public schools. *Economics of Education Review*, 24(2), 133–147.

Beyeler, N., York De La Cruz, A., & Montagu, D. (2013). The impact of clinical social franchising on health services in low- and middle-income countries: A systematic review. *PLoS ONE*, 8(4), e60669.

Bhatia, M., & Angelou, N. (2015). *Beyond connections: Energy access redefined* (ESMAP Technical Report 008/15). World Bank.

Bijman, J., Muradian, R., & Schuurman, J. (Eds.). (2016). *Cooperatives, economic democratization and rural development*. Edward Elgar Publishing.

Bloom, D. E., & Canning, D. (2000). The health and wealth of nations. *Science*, 287(5456), 1207–1209.

Bloom, N., Bond, S., & Van Reenen, J. (2007). Uncertainty and investment dynamics. *Review of Economic Studies*, 74(2), 391–415.

Bocarejo, J. P., & Oviedo, D. R. (2012). Transport accessibility and social inequities: A tool for identification of mobility needs and evaluation of transport investments. *Journal of Transport Geography*, 24, 142–154.

Bocarejo, J. P., Portilla, I., & Meléndez, D. (2015). Social fragmentation as a consequence of implementing a bus rapid transit system in the city of Bogotá. *Urban Studies*, 53(8), 1617–1634.

Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56.

Bowen, T. V., Del Ninno, C., Andrews, C., Coll-Black, S., Gentilini, U., Johnson, K., Kawasoe, Y., Kryeziu, A., Maher, B. P., & Williams, A. M. (2020). *Adaptive social protection: Building resilience to shocks (Vol. 1).* World Bank Group.

Bruhn, M., & Love, I. (2014). The real impact of improved access to finance: Evidence from Mexico. *Journal of Finance*, 69(3), 1347–1376.

Brunetti, A., & Weder, B. (1998). Investment and institutional uncertainty: A comparative study of different uncertainty measures. *Weltwirtschaftliches Archiv*, 134(3), 513–533.

Buhmann, K., Jonsson, J., & Fisker, M. (2019). Do no harm and do more good too: Connecting the SDGs with business and human rights and political CSR theory. *Corporate Governance: The International Journal of Business in Society*, 19(3), 389–493.

Busse, M., & Hefeker, C. (2007). Political risk, institutions, and foreign direct investment. *European Journal of Political Economy*, 23(2), 397–415.

Byiers, B., & Vanheukelom, J. (2014). *What drives regional economic integration? Lessons from the Maputo Development Corridor and the North-South Corridor* (ECDPM Discussion Paper No. 157). European Centre for Development Policy Management.

Cabraal, A., Ward, W. A., Bogach, V. S., & Jain, A. (2021). *Living in the light: The Bangladesh solar home systems story.* World Bank.

Calderón, C., & Servén, L. (2004). *The effects of infrastructure development on growth and income distribution* (Policy Research Working Paper No. 3400). The World Bank.

Card, D., Kluve, J., & Weber, A. (2018). What works? A meta-analysis of recent active labor market program evaluations. *Journal of the European Economic Association*, 16(3), 894–931.

Carpenter, D., & Moss, D. A. (Eds.). (2013). *Preventing regulatory capture: Special interest influence and how to limit it.* Cambridge University Press.

Castillo-Canales, D., Mejías, L., Roque-Gutierrez, E., Valentini, A., & Rüebcke, J. (2023). *Ed-tech landscape and challenges in Latin America and the Caribbean*. Southern Voice.

Causa, O., & Hermansen, M. (2017). *Income redistribution through taxes and transfers across OECD countries* (OECD Economics Department Working Paper No. 1453). OECD Publishing.

Cazes, S., Khatiwada, S., & Malo, M. (2012). *Employment protection and collective bargaining: Beyond the deregulation agenda* (ILO Employment Working Paper No. 133). International Labour Organization.

Cederman, L.-E., Weidmann, N. B., & Gleditsch, K. S. (2011). Horizontal inequalities and ethnonationalist civil war: A global comparison. *American Political Science Review*, 105(3), 478–495.

Cervantes-Gómez, J. A., Javier, H., & Cano, V. A. (2023). A political economy of youth policy in Mexico. *Journal of Youth Studies*, 1–18.

Cervero, R. (1998). *The transit metropolis: A global inquiry.* Island Press.

Cervero, R. (2013). *Bus rapid transit (BRT): An efficient and competitive mode of public transport*. Institute of Urban and Regional Development, UC Berkeley.

Chaiittipornwong, Y., Seo, J.-W., & Park, H. (2024). An importance-performance gap analysis for innovation in public transport financing: Critical success factors of public-private partnership in mass rapid transit in Bangkok. *Asian Journal of Innovation and Policy*, 13(1), 113–132.

Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2022). *World inequality report 2022*. World Inequality Lab.

Chen, G., & Jaramillo, C. F. (2024, February 12). *Transforming urban transport: Lessons from Quito's Metro Line One.* World Bank Blogs.

Chien, C. V. (2007). HIV/AIDS drugs for sub-Saharan Africa: How do brand and generic supply compare? *PLoS ONE*, 2(3), e278.

Cho, Y., & Honorati, M. (2014). Entrepreneurship programs in developing countries: A meta-regression analysis. *Labour Economics*, 28, 110–130.

Christopher, M., & Peck, H. (2004). Building the resilient supply chain. *The International Journal of Logistics Management*, 15(2), 1–14.

Cicala, S. (2021). The incidence of extreme economic stress: Evidence from utility disconnections. *Journal of Public Economics*, 200, 104461.

Coady, M. D., Flamini, V., & Sears, L. (2015). *The unequal benefits of fuel subsidies revisited: Evidence for developing countries* (IMF Working Paper No. WP/15/250). IMF.

Cobham, A., & Janský, P. (2018). Global distribution of revenue loss from corporate tax avoidance: Re-estimation and country results. *Journal of International Development*, 30(2), 206–232.

Cornick, J., & Lara, J. D. (2020). *The regulation of distributed solar power generation in Costa Rica: Status, challenges and options for the future* (IDB Working Paper No. IDB-WP-1022). Inter-American Development Bank.

Cornick, J., & Trejos, A. (2016). *Building public capabilities for productive development policies: Costa Rican case studies* (Working Paper No. 8017). Inter-American Development Bank.

Crawfurd, L., Hares, S., & Todd, R. (2024). The impact of private schools, school chains and PPPs in developing countries. *The World Bank Research Observer*, 39(1), 97–123.

Center for Research on Education Outcomes. (2023). *As a matter of fact: The national charter school study III 2023*. Stanford University.

Dabla-Norris, E., & Kochhar, K. (2019). The gender gap: The economic benefits of bringing more women into the labor force are greater than previously thought. *Finance and Development*, IMF.

Dabla-Norris, E., Kochhar, K., Ricka, F., Suphaphiphat, N., & Tsounta, E. (2015). *Causes and consequences of income inequality: A global perspective* (IMF Staff Discussion Note No. 15/13). IMF.

de Almeida Correia, P., Carpio-Pinedo, J., Moya-Gómez, B., & Condeço-Mehorado, A. (2025). Modal accessibility gap in Curitiba (Brazil): Dynamic analysis considering time and spatial variations. *Applied Spatial Analysis and Policy*, 18, 34.

De Gruyter, C., Currie, G., & Rose, G. (2016). Sustainability measures of urban public transport in cities: A world review and focus on the Asia/Middle East region. *Sustainability*, 9(1).

Dearden, L., Reed, H., & Van Reenen, J. (2006). The impact of training on productivity and wages: Evidence from British panel data. *Oxford Bulletin of Economics and Statistics*, 68(4), 397–421.

Del-Río-Carazo, L., Acquila-Natale, E., Iglesias-Pradas, S., & Hernández-García, Á. (2022). Sustainable rural electrification project management: An analysis of three case studies. *Energies*, 15(3), 1–21.

Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The global Findex database 2017: Measuring financial inclusion and the fintech revolution*. World Bank.

Demirgüç-Kunt, A., Klapper, L., & Singer, D. (2017). *Financial inclusion and inclusive growth: A review of recent empirical evidence* (Policy Research Working Paper No. 8040). World Bank Group.

Demuyakor, J. (2020). Ghana go digital agenda: The impact of Zipline drone technology on digital emergency health delivery in Ghana. *Shanlax International Journal of Arts, Science and Humanities*, 8(1), 242–253.

DFID. (2013). *Secure property rights and development: Economic growth and household welfare* (DFID Evidence Paper).

Duong, T. T., Oke, N., & Baker, A. (2024). Women workers and the contestation of gender roles in Vietnam's new rural factories. *Journal of Gender Studies*, 33(7), 891–901.

Economic Policy Institute. (2024). *The productivity–pay gap*. Economic Policy Institute.

Edrak, B., Nor, Z. M., & Shaik, A. R. (2022). The readiness of Malaysia digital economy: A study of three government policies from 1991 to 2020. *International Journal of Economics and Finance*, 14(12), 84–91.

ENERGIA. (2023). *Climate resilience project performance & impact report*. ENERGIA International Network on Gender and Sustainable Energy.

Energy Sector Management Assistance Program. (2022). *Regulatory indicators for sustainable energy (RISE) 2022: Building resilience.* World Bank.

ENGIE. (2023). *ENGIE energy access: Performance and impact review*. ENGIE Energy Access.

Espinoza, O., Sandoval, L., Corradi, B., McGinn, N., Larrondo, Y. & Maldonado, K. (2024). The effects of free tuition policy on university academic performance in Chile. *British Educational Research Journal*, 00, 1–15.

Estache, A., Gómez-Lobo, A., & Leipziger, D. (2001). Utilities privatization and the poor: Lessons and evidence from Latin America. *World Development*, 29(7), 1179–1198.

Eurodad. (2018). *History RePPPeated: How public-private partnerships are failing.* Eurodad.

Fajnzylber, P., Lederman, D., & Loayza, N. (2002). Inequality and violent crime. *Journal of Law and Economics*, 45(1), 1–39.

Fan, S., & Sun, X. (2008). Regional inequality in China, 1978–2006. *Eurasian Geography and Economics*, 49(1), 1–18.

Fang, L., Wang, L., & Zhang, X. (2023). The impact of internet use on the well-being of rural residents—mediating effect based on social capital. *Agriculture*, 13(7), 1462.

Farole, T. (2011). *Special economic zones in Africa: Comparing performance and learning from global experience.* World Bank.

Ferman, B., Finamor, L., & Lima, L. (2019). *Are public schools in developing countries ready to integrate EdTech into regular instruction?* [Unpublished thesis]. São Paulo School of Economics, Yale, and São Paulo School of Business Administration.

Figlio, D., & Hart, C. (2014). Competitive effects of means-tested school vouchers. *American Economic Journal: Applied Economics*, 6(1), 133–156.

Fiszbein, A., & Schady, N. R. (2009). *Conditional cash transfers: Reducing present and future poverty*. The World Bank.

FAO. (2011). *The state of food and agriculture: Women and agriculture—Closing the gender gap for development*.

FAO. (2022). *Agricultural cooperatives, responsible sourcing and risk-based due diligence*.

Fort, C., & Haniya, S. (2023). A call-to-action to promote diversity and social justice in digital technologies. In *Proceedings of INTED2023 Conference* (pp. 2300–2306). Pepperdine University.

Foster, V., & Rana, A. (2020). *Rethinking power sector reform in the developing world.* World Bank.

Fundação Lemann & Khan Academy. (2018). *Five years of Khan Academy in Brazil: Impact and lessons learned*. Fundação Lemann.

Galor, O., & Zeira, J. (1993). Income distribution and macroeconomics. *The Review of Economic Studies*, 60(1), 35–52.

García-Escribano, M. (2020). Low internet access driving inequality. *IMF Blog*.

Garg, S., Bebarta, K. K., & Tripathi, N. (2024). The Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) after four years of implementation—is it making an impact on quality of inpatient care and financial protection in India? *BMC Health Services Research*, 24, 919.

Gasparini, L., Cruces, G., & Tornarolli, L. (2011). Recent trends in income inequality in Latin America. *Economía*, 11(2), 147–190.

Gethin, A. (2023). *Distributional growth accounting: Education and the reduction of global poverty, 1980–2022* (Working Paper No. 2023/25). World Inequality Lab.

Global Infrastructure Hub. (2020). *Inclusive infrastructure and social equity: Practical guidance for increasing the positive social outcomes of infrastructure projects*. Global Infrastructure Hub.

Global Infrastructure Hub. (n.d.). El Metropolitano Bus Rapid Transit – Peru.

GOGLA. (2020). *Powering opportunity: Energising work, enterprise, and quality of life with off-grid solar*. GOGLA.

Gonzalez Castillo, S. H. (2019). *Smart solutions to Panama traffic congestion* [Unpublished thesis]. Aalborg University.

Government of India. (2020). *National education policy 2020*. Ministry of Human Resource Development.

Graves, J. M., Abshire, D. A., Amiri, S., & Mackelprang, J. L. (2021). Disparities in technology and broadband internet access across rurality: Implications for health and education. *Family & Community Health*, 44(4), 257–265.

Gray-Lobe, G., Keats, A., Kremer, M., Mbiti, I., & Ozier, O. W. (2022). *Can education be standardized? Evidence from Kenya* (Working Paper No. 2022-68). Becker Friedman Institute for Economics, University of Chicago.

Gray, L., Boyle, A., Francks, E., & Yu, V. (2018). The power of small-scale solar: Gender, energy poverty, and entrepreneurship in Tanzania. *Development in Practice*, 29(1), 26–39.

Grossman, A. S., & Garcia-Cuellar, R. (2011). *Salud Digna: Successfully competing with for-profit organizations* (Harvard Business School Case 311-051). Harvard Business School.

GSMA. (2019). *The impact of spectrum prices on consumers*.

GSMA. (2023). *Mobile for development: Driving innovation in digital technology to reduce inequalities in our world*.

Hage, E., Roo, J. P., van Offenbeek, M. A., & Boonstra, A. (2013). Implementation factors and their effect on e-health service adoption in rural communities: A systematic literature review. *BMC Health Services Research*, 13, 19.

Hanushek, E. A., & Woessmann, L. (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth*, 17(4), 267–321.

Heinemann, G. (2022). Innovating in the off-grid sector: Sustainable supply chains and business models for solar home system provision in Bangladesh and Kenya. *Energy Research & Social Science*, 94, 1–21.

Heuër, A. (2017). Women-to-women entrepreneurial energy networks: A pathway to green energy uptake at the base of pyramid. *Sustainable Energy Technologies and Assessments*, 22, 116–123.

Hidalgo-Crespo, J., Bautista-Espinosa, H., & Oviedo, J. (2022). Viability of a rural electrification program in Peru. *EASI: Engineering and Applied Sciences in Industry, 1*(2), 34–45.

Hidalgo, D., & Muñoz, J. C. (2014). A review of technological improvements in bus rapid transit (BRT) and buses with high level of service (BHLS). *Public Transport*, 6(3), 185–213.

Hoeckel, K., & Schwartz, R. (2010). *OECD reviews of vocational education and training: A learning for jobs review of Germany 2010*. OECD Publishing.

Hoffman, N., & Schwartz, R. (2015). *Gold standard: The Swiss vocational education*. International Comparative Study of Vocational Education Systems. National Center on Education and Economy (NCEE). Center on International Education Benchmarking

Holzer, H., & Neumark, D. (2006). Affirmative action: What do we know? *Journal of Policy Analysis and Management, 25*(2), 463–490.

Hsieh, C. T., & Urquiola, M. (2006). The effects of generalized school choice on achievement and stratification: Evidence from Chile's voucher program. *Journal of Public Economics*, 90(8–9), 1477–1503.

IDB. (2024). IDB backs electric mobility and resilient public transportation in Panama City. *IDB News Releases*.

IFC. (2013). *IFC jobs study: Assessing private sector contributions to job creation and poverty reduction*. World Bank.

IFC. (2020). Digitizing Africa's logistics landscape.

ILO. (2018). *Global wage report 2018/19: What lies behind gender pay gaps*.

ILO. (2022). *Setting adequate wages: The question of living wages* (ILO Brief).

IMF. (2013). IMF facilitates debate on private sector, growth, jobs in Mideast. *IMF Country Focus*.

IMF. (2021). *Macroeconomic stability and inclusive growth* (IMF Working Paper No. WP/21/81).

Impullitti, G., & Rendahl, P. (2025). *Market power, growth, and wealth inequality* (CEPR Discussion Paper No. 19911). Centre for Economic Policy Research.

International Energy Agency, IRENA, UNSD, World Bank, & WHO. (2024). *Tracking SDG 7: The energy progress report*. World Bank.

International Energy Agency. (2022). *Energy efficiency 2022.*

Inter-agency Network for Education in Emergencies. (2021). *Creating an enabling non-formal education environment for youth in crisis and conflict settings (Policy Note).*

International Renewable Energy Agency. (2020). *Innovation landscape brief: Energy as a service.*

ITU. (2024a). *Measuring digital development: Facts and figures 2024*.

ITU. (2024b). *Global Cybersecurity Index 2024.*

Izuka, N. U., Gbenga, G., Abolore Ayodeji, N. S., Chinyere, T., & Ebhohime, V. (2023). Powering rural healthcare with sustainable energy: A global review of solar solutions. *Engineering Science & Technology Journal*, 4(4), 190–208.

Jack, W., & Suri, T. (2011). *Mobile money: The economics of M-PESA* (NBER Working Paper No. 16721). National Bureau of Economic Research.

Japan International Cooperation Agency. (2014). *Roadmap for transport infrastructure development for Metro Manila and its surrounding areas (region III & region IV-A) in the Republic of the Philippines: Final report*.

Johnson, E. (2023). *Supply responses to targeted government aid: Evidence from free college in Chile* [Job market paper]. University of Chicago, Social Sciences Division.

Julio, B., & Yook, Y. (2012). Political uncertainty and corporate investment cycles. *The Journal of Finance*, 67(1), 45–83.

Kanbur, R., Ortiz-Juarez, E., & Sumner, A. (2024). Is the era of declining global income inequality over? *Structural Change and Economic Dynamics*, 70, 45–55.

Kantar Public. (2023). *Evaluating the social and economic impact of HUL's Project Shakti*. Hindustan Unilever Limited.

Kelly, M. (2000). Inequality and crime. *Review of Economics and Statistics*, 82(4), 530–539.

Khandker, S. R., Bakht, Z., & Koolwal, G. B. (2009). The poverty impact of rural roads: Evidence from Bangladesh. *Economic Development and Cultural Change*, 57(4), 685–722.

Kharas, H. (2017). *The unprecedented expansion of the global middle class: An update* (Global Economy and Development Working Paper No. 100). Brookings Institution.

Kingiri, A. N., & Fu, X. (2019). Understanding the diffusion and adoption of digital finance innovation in emerging economies: M-Pesa money mobile transfer service in Kenya. *Innovation and Development*, 10(1), 67–87.

Kistruck, G. M., Webb, J. W., Sutter, C. J., & Bailey, A. V. (2011). Microfranchising in base-of-the-pyramid markets: Institutional challenges and adaptations to the franchise model. *Entrepreneurship Theory and Practice*, 35(3), 503–531.

Kluve, J., Puerto, S., Robalino, D., Romero, J. M., Rother, F., Stöterau, J., Weidenkaff, F., & Witte, M. (2019). Do youth employment programs improve labor market outcomes? A quantitative review. *World Development*, 114, 237–253.

Kooijman-van Dijk, A. L., & Clancy, J. (2010). Impacts of electricity access to rural enterprises in Bolivia, Tanzania and Vietnam. *Energy for Sustainable Development*, 14(1), 14-21.

Kozlakidis, Z., Kealy, J., & Henderson, M. K. (2024). Digitization of healthcare in LMICs: Challenges and opportunities in data governance and data infrastructure. In *Digitalization of medicine in low- and middle-income countries: Paradigm changes in healthcare and biomedical research* (pp. 83–90). Springer Nature.

Kruse, D. L. (2016). Does employee ownership improve performance? *IZA World of Labor.*

Kumhof, M., Rancière, R., & Winant, P. (2015). Inequality, leverage, and crises. *American Economic Review*, 105(3), 1217–1245.

Kylasapathy, P., Boon, T., & Zukki, A. H. M. (2018). *Unlocking Malaysia's digital future: Opportunities, challenges and policy responses*. Central Bank of Malaysia.

Lagomarsino, G., Garabrant, A., Adyas, A., Muga, R., & Otoo, N. (2012). Moving towards universal health coverage: Health insurance reforms in nine developing countries in Africa and Asia. *The Lancet*, 380(9845), 933–943.

Lakner, C., & Milanovic, B. (2016). Global income distribution: From the fall of the Berlin Wall to the Great Recession. *World Bank Economic Review*, 30(2), 203–232.

Lakner, C., Negre, M., & Prydz, E. B. (2014). *Twinning the goals: How can promoting shared prosperity help to reduce global poverty?* (Policy Research Working Paper No. 7106). World Bank.

Le Fort Varela, G., Gallardo, B., & Bustamante, F. (2020). Macroeconomic stability and economic growth: Myths and realities. *CEPAL Review*, 131.

Lee, H.-A. (2021). *Affirmative action in Malaysia and South Africa: Preference for parity*. Routledge.

Lehoucq, F. (2010). Political competition, constitutional arrangements, and the quality of public policies in Costa Rica. *Latin American Politics and Society, 52*(4), 53–77.

Leibbrandt, M., Ranchhod, V., & Green, P. (2018). *Taking stock of South African income inequality* (WIDER Working Paper No. 2018/184). UNU-WIDER.

Lertsethtakarn, K. (2018). Public-private partnership (PPP) in Thailand: A case study of Bangkok mass transit system (BTS). *Journal of Public and Private Management*, 25(1), 89–114.

Lexology (2022). *Multimedia Super Corridor (MSC) to Malaysia Digital (MD): A revamp of Malaysia's digital economy initiative.*

Light, D., & Pierson, E. (2014a). Increasing student engagement in math: The use of Khan Academy in Chilean classrooms. *International Journal of Education and Development Using Information and Communication Technology*, 10(2), 103–119.

Light, D., & Pierson, E. (2014b). *The use of Khan Academy in Chilean classrooms: Study of an Intel-funded pilot program in Chile*. Paper presented at the International Conference on Advanced Learning Technologies (ICALT), Athens, Greece.

Lillo, P., Ferrer-Martí, L., & Juanpera, M. (2021). Strengthening the sustainability of rural electrification projects: Renewable energy, management models and energy transitions in Peru, Ecuador and Bolivia. *Energy Research & Social Science*, 80, 1–8.

Linnan, L. A. (2010). The business case for employee health: What we know and what we need to do. *North Carolina Medical Journal*, 71(1), 69–74.

Loh, Y. X., Hamid, N. A. A., Seah, C. S., Yo, J. J., Law, Y. C., Tan, S. Y., Chung, H. L., Liew, Y. L., & Chong, C. (2021). The factors and challenges affecting digital economy in Malaysia. *Conference on Management, Business, Innovation, Education and Social Sciences*, 1(1), 1843–1849.

Lokman, L., & Chahine, T. (2021). Business models for primary health care delivery in low- and middle-income countries: A scoping study of nine social entrepreneurs. *BMC Health Services Research*, 21(1), 211.

Lopez-Calva, L. F., & Lustig, N. (Eds.). (2010). *Declining inequality in Latin America: A decade of progress?* Brookings Institution Press and UNDP.

Lundborg, P., Nilsson, A., & Rooth, D.-O. (2014). Adolescent health and adult labor market outcomes. *Journal of Health Economics*, 37, 25–40.

Lustig, N. (2016). Inequality and fiscal redistribution in middle income countries: Brazil, Chile, Colombia, Indonesia, Mexico, Peru and South Africa. *Journal of Globalization and Development*, 7(1), 17–60.

Lustig, N. (2018). Fiscal policy, income redistribution and poverty reduction in low- and middle-income countries. In N. Lustig (Ed.), *Commitment to equity handbook: Estimating the impact of fiscal policy on inequality and poverty*. Brookings Institution Press and CEQ Institute, Tulane University.

Lustig, N., Lopez-Calva, L. F., & Ortiz-Juarez, E. (2013). Declining inequality in Latin America in the 2000s: The cases of Argentina, Brazil, and Mexico. *World Development*, 44, 129–141.

Lustig, N., Lopez-Calva, L. F., & Ortiz-Juarez, E. (2016). Deconstructing the decline in inequality in Latin America. In K. Basu & J. E. Stiglitz (Eds.), *Inequality and growth: Patterns and policy*. Palgrave Macmillan.

M-Kopa. (2024). *M-Kopa impact report 2024: Pathways to progress*. M-Kopa.

Madriz-Vargas, R., Bruce, A., Watt, M., & Alvarados Rojas, Y. (2016). *Energy with development: 50 years' experience of community-driven rural electrification and future challenges for COOPEGUANACASTE in Costa Rica*. Paper presented at the Asia-Pacific Solar Research Conference.

Mahajan, R., & Bandyopadhyay, K. R. (2021). Women entrepreneurship and sustainable development: Select case studies from the sustainable energy sector. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(1), 42–75.

MDEC. (n.d.a). About MDEC.

MDEC. (n.d.b). Saya Digital – Literasi.

Mas Ribo, I., & Radcliffe, D. E. (2010). *Mobile payments go viral: M-PESA in Kenya*. World Bank.

Masaki, T., Granguillhome Ochoa, R., & Rodriguez-Castelan, C. (2020). *Broadband internet and household welfare in Senegal* (Policy Research Working Paper No. 9386). World Bank.

Mattesco, C., & Sassone-Lawless, E. (2018). *A roadmap to the state of electric vehicles in Panama*. CATHALAC.

McKinsey & Company. (2020). *Diversity wins: How inclusion matters*.

Mejdalani, A., Mendes e Costa, R., Hallack, M., Lopez, D., & Vazquez, M. (2018). *A brighter future: The impact of rural school electrification programs on the dropout rate in primary education in Brazil* (Technical Note No. IDB-TN-1590). Energy Division, Inter-American Development Bank.

Mian, A., Straub, L., & Sufi, A. (2021). Indebted demand. *Quarterly Journal of Economics*, 136(4), 2243–2307.

Microsoft. (2023). Collective Impact Program to drive Malaysia's journey towards inclusive digital economy.

Minot, N., & Sawyer, B. (2016). Contract farming in developing countries: Theory, practice, and policy implications. In A. Devaux, M. Torero, J. Donovan, & D. Horton (Eds.), *Innovation for inclusive value-chain development: Successes and challenges* (pp. 127–158). International Food Policy Research Institute.

Mishel, L., & Bivens, J. (2021). *Identifying the policy levers generating wage suppression and wage inequality*. Economic Policy Institute.

Misra, N. (2015). Sustainable energy for all: Empowering women. *UN Chronicle, 52*(3).

Missoni, E., & Solimano, G. (2010). *Towards universal health coverage: The Chilean experience* (World Health Report 2010 Background Paper, No. 4). World Health Organization.

Montagu, D., Goodman, C., Berman, P., Penn, A., & Visconti, A. (2016). Recent trends in working with the private sector to improve basic healthcare: A review of evidence and interventions. *Health Policy and Planning, 31*(8), 1117–1132.

Moore, M., Prichard, W., & Fjeldstad, O.-H. (2018). *Taxing Africa: Coercion, reform and development*. Zed Books.

Mora-Salas, M., & Cortes, G. A. U. (2021). Is there a new youth policy in Mexico? *Journal of Applied Youth Studies*, 4(3), 261–276.

Moreno, F. A., Banerjee, S. G., Sinton, J., Primiani, T., & Seong, J. (2017). *Regulatory indicators for sustainable energy: A global scorecard for policy makers.* World Bank.

Morgenstern-Kaplan, D., Rocha-Haro, A., Canales-Albarrán, S. J., Núñez-García, E., & León-Mayorga, Y. (2021). An app-based telemedicine program for primary care and specialist video consultations during the COVID-19 pandemic in Mexico. *Telemedicine and e-Health*, 28(1), 60–65.

Mouton, M., & Shatkin, G. (2019). Strategizing the for-profit city: The state, developers, and urban production in Mega Manila. *Economy and Space*, 52(2), 403–422.

Mukherjee, A. (2019). Jio sparks disruption 2.0: Infrastructural imaginaries and platform ecosystems in 'Digital India'. *Media, Culture & Society*, 41(2), 175–195.

Munroe, E., Hayes, B., & Taft, J. (2015). Private-sector social franchising to accelerate family planning access, choice, and quality: Results from Marie Stopes International. *Global Health: Science and Practice*, 3(2), 195–208.

Nathan Associates. (2011). *Corridor diagnostic study of the northern and central corridors of East Africa*. USAID.

Navalersuph, N., & Charoenngam, C. (2021). Governance of public–private partnerships in transportation

infrastructure projects based on Thailand's experiences. *Case Studies on Transport Policy*, 9(3), 1211–1218.

Ndung'u, N. S. (2021). *A digital financial services revolution in Kenya: The M-Pesa case study*. African Economic Research Consortium.

Neath, G., & Sharma, V. (2008). The Shakti revolution. *Development Outreach*. World Bank.

Negera, M., Dejen, Z. A., Melaku, D., Tegegne, D., Adamseged, M. E., & Haileslassie, A. (2025). Agricultural Productivity of Solar Pump and Water Harvesting Irrigation Technologies and Their Impacts on Smallholder Farmers' Income and Food Security: Evidence from Ethiopia. *Sustainability*, 17(4), 1486.

Northern Corridor Transport Observatory. (2016). *Northern corridor transport observatory report: Towards efficient corridor performance* (Issue No. 8).

OECD. (2009). *Promoting Pro-Poor Growth: Social Protection*. OECD Publishing.

OECD. (2017a). *Preventing policy capture: Integrity in public decision making.* OECD Publishing.

OECD. (2017b). *Education in Chile, Reviews of national policies for education.* OECD Publishing.

OECD. (2018). *Good jobs for all in a changing world of work: The OECD jobs strategy*. OECD Publishing.

OECD. (2020). *OECD economic surveys: Costa Rica 2020.* OECD Publishing.

Ortegon-Sanchez, A., & Tyler, N. (2016). Towards multi-modal integrated mobility systems: Views from Panama City and Barranquilla. *Research in Transportation Economics*, 59, 204–217.

Østby, G. (2008). Polarization, horizontal inequalities and violent civil conflict. *Journal of Peace Research*, 45(2), 143–162.

Ostry, J. D., Berg, A., & Tsangarides, C. (2014). *Redistribution, inequality, and growth* (IMF Staff Discussion Note No. 14/02). IMF.

Ostry, J. D., Alvarez, J., Espinoza, R., & Papageorgiou, C. (2018). *Economic gains from gender inclusion: New mechanisms, new evidence* (IMF Staff Discussion Note No. 18/06). IMF.

Oxfam (2014). *A dangerous diversion: Will the IFC's flagship health PPP bankrupt Lesotho's Ministry of Health?* Oxfam International.

Oxfam. (2019). *The power of education to fight inequality: How increasing educational equality and quality is crucial to fighting economic and gender inequality.*

Oxfam. (2023a). *Sick development: How rich-country government and World Bank funding to for-profit private hospitals causes harm, and why it should be stopped* (Oxfam Briefing Paper).

Oxfam. (2023b). *First, do no harm: Examining the impact of the IFC's support to private healthcare in India.*

Paes de Barros, R., Foguel, M. N., & Ulyssea, G. (Eds.). (2007). *The recent decline in income inequality in Brazil*. IPEA.

Park, J. (2021). Theorizing and learning from Kenya's evolving solar energy enterprise development. *Energy Research & Social Science*, 81, 1–4.

Parsheera, S., & Trehan, V. (2020). A structural analysis of the mobile telecommunications market: Exploring the Jio effect. In *The philosophy and law of information regulation in India*. Centre for Law and Policy Research.

Patrinos, H. A., Barrera-Osorio, F., & Guáqueta, J. (2009). *The role and impact of public-private partnerships in education.* World Bank.

Phillips, J., Plutshack, V., & Yeazel, S. (2020). *Lessons for Modernizing Energy Access Finance, Part 1: What the Electrification Experiences of Seven Countries Tell Us about the Future of Connection Costs, Subsidies, and Integrated Planning*. (NI Policy Brief 20-02). Duke University.

Pinneo, J. (2024). Discover Solar Sister's unique training modules. Solar Sister.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*, 89(1–2), 62–77.

Psacharopoulos, G., & Patrinos, H. A. (2004). Returns to investment in education: A further update. *Education Economics*, 12(2), 111–134.

Rajan, R. G. (2010). *Fault lines: How hidden fractures still threaten the world economy*. Princeton University Press.

Ranalder, L. (2017). *[Em]powering communities? Explaining the changing role and nature of Costa Rica's cooperatives from successful community-led electrification to failing community-led electricity generation* [Unpublished thesis]. Lund University.

Rashed, A. H., & Shah, A. (2021). The role of private sector in the implementation of sustainable development goals. *Environment, Development and Sustainability*, 23(3), 2931–2948.

Rastogi, C. (2018). M-Kopa Solar: Lighting up the dark continent. *South Asian Journal of Business and Management Cases*, 7(2), 93–103.

Rathie, N. (2022). *Widening opportunity with accessibility.* UNDP Thailand.

Rawlings, L. B., & Rubio, G. M. (2005). Evaluating the impact of conditional cash transfer programs. *The World Bank Research Observer*, 20(1), 29–55.

Razavi, S., Cattaneo, U., Schwarzer, H., & Visentin, A. (2024). *Combating inequalities: What role for universal social protection?* (ILO Working Paper No. 128). ILO

Return on Disability Group. (2023). *The Global Economics of Disability: The Return on Disability Report.*

Rocha-Haro, A., Morgenstern-Kaplan, D., Canales-Albarrán, S. J., Núñez-García, E., & León-Mayorga, Y. (2021). The Coronaid Program: An app-based telemedicine tool for triaging, testing, treating and monitoring COVID-19 patients in Mexico. *Cureus*, 13(11).

Rouse, M., Batiz-Lazo, B., & Carbo-Valverde, S. (2023). M-Pesa and the role of the entrepreneurial state in a cashless technology to deliver an inclusive financial sector. *Essays in Economic & Business History*, 41(1), 109–133.

Saksena, P., Antunes, A. F., Xu, K., Musango, L., & Carrin, G. (2011). Mutual health insurance in Rwanda: Evidence on access to care and financial risk protection. *Health Policy, 99*(3), 203–209.

Salemink, K., Strijker, D., & Bosworth, G. (2017). Rural development in the digital age: A systematic literature review on unequal ICT availability, adoption, and use in rural areas. *Journal of Rural Studies*, 54, 360–371.

Santos, F. (2012). A positive theory of social entrepreneurship. *Journal of Business Ethics*, 111(3), 335–351.

Schneider, A. C., Arcego, E., & Schneider, A. C. (2021). The University for All Program (ProUni): From statistics up to the law and development approach. *Planejamento e Políticas Públicas*, (52).

Scholl, L., Fook, A., Barahona, J. D., & Lee, S. (2022). How can transport reduce poverty and promote socially inclusive development? *Moviliblog*, IDB.

Schouten, G., & Faling, M. (2022). Who profits from inclusive business models? *The Broker.*

Scott, L., Dolan, C., Johnstone-Louis, M., Sugden, K., & Wu, M. (2012). Enterprise and inequality: A study of Avon in South Africa. *Entrepreneurship Theory and Practice*, 36(3), 543–568.

Sears, L. E., Shi, Y., Coberley, C. R., & Pope, J. E. (2013). Overall well-being as a predictor of health care, productivity, and retention outcomes in a large employer. *Population Health Management*, 16(6), 397–405.

Seelos, C., & Mair, J. (2005). Social entrepreneurship: Creating new business models to serve the poor. *Business Horizons*, 48(3), 241–246.

Sequeira, S., Hartmann, O., & Kunaka, C. (2014). *Reviving trade routes: Evidence from the Maputo Corridor* (SSATP Discussion Paper No. 14). World Bank.

Smith, J. P. (2009). The impact of childhood health on adult labor market outcomes. *The Review of Economics and Statistics*, 91(3), 478–489.

Solar Sister. (2024). *Why off-grid energy matters 2024*. Solar Sister.

Soler Guzmán, A., van Oldeneel, I., Jæger, J., Lecoque, D., & Cuervo, J. (2021). *Status of the off-grid renewable energy market in Latin America & the Caribbean*. IDB.

Spatafora, N. (2021). *Education and health for inclusiveness* (IMF Working Paper No. 060). IMF.

Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 1288–1292.

Sungi, S.P., Osiro, M.A., & Odhiambo, T.J. (2022). M-Pesa and transnational organized crime: Causes and facilitation factors. *International Journal of Security Studies & Practice*, 2(1), pp.1–19.

Suzuki, H., Cervero, R., & Iuchi, K. (2013). *Transforming cities with transit*. World Bank Publications.

Sylverken, A. A., Owusu, M., Agbavor, B., Kwarteng, A., Kwame Ayisi-Boateng, N., Ofori, P. El-Duah, R. et al. (2022). Using drones to transport suspected COVID-19 samples: Experiences from the second largest testing centre in Ghana, West Africa. *PLOS ONE*, 17(11), 1–13.

Tenório, M. M., Lopes, R. P., Góis, L. A., & Junior, G. dos S. (2018). Influence of gamification on Khan Academy in Brazilian high school. *PUPIL: International Journal of Teaching, Education and Learning*, 2(2), 51–65.

Termes, A., Bonal, X., Verger, A., & Zancajo, A. (2015). *Public-private partnerships in Colombian education: The equity and quality implications of 'Colegios en concesión'* (ESP Working Paper Series No. 78). Privatisation of Education Research Initiative.

Tham, S. Y. (2018). *The Digital Free Trade Zone (DFTZ): Putting Malaysia's SMEs onto the Digital Silk Road* (ISEAS Perspective No. 17). ISEAS – Yusof Ishak Institute.

The Business Commission to Tackle Inequality. (2023). *Tackling inequality: An agenda for business action*. World Business Council for Sustainable Development.

Thomas, D. P. (2013). The Gautrain project in South Africa: A cautionary tale. *Journal of Contemporary African Studies, 31*(1), 77–94.

Thurston, S., Chakraborty, N. M., & Hayes, B. (2015). Establishing and scaling-up clinical social franchise networks: Lessons learned from Marie Stopes International and Population Services International. *Global Health: Science and Practice*, 3(2), 180–194.

Todes, A. (2012). Urban growth and strategic spatial planning in Johannesburg, South Africa. *Cities, 29*(3), 158–165.

Topuz, S. G. (2022). The relationship between income inequality and economic growth: Are transmission channels effective? *Social Indicators Research*, 162(3), 1177–1231.

Tsounta, E., & Osueke, A. I. (2014). *What is behind Latin America's declining income inequality?* (IMF Working Paper No. 14/124). IMF.

Turbay, A. L. B., Pereira, R. H. M., & Firmino, R. (2024). The equity implications of TOD in Curitiba. *Case Studies on Transport Policy*, 16.

UNCTAD. (2020). *Economic development in Africa report 2020: Tackling illicit financial flows for sustainable development in Africa*. UNCTAD.

UNDP. (2013). *Humanity divided: Confronting inequality in developing countries*.

UNESCAP. (2021). *Public-private partnerships for reducing inequality in Latin America and the Caribbean: The cases of Colombia and Mexico*. United Nations Economic and Social Commission for Asia and the Pacific.

UNESCO. (2021). *Global education monitoring report 2021/2: Non-state actors in education: Who chooses? Who loses?*

UNICEF. (n.d.). *Giga: Connecting every school to the internet*. UNICEF Office of Innovation.

UNDESA. (2024). *Youth building the future program*. United Nations Department of Economic and Social Affairs.

Unwin, T. (2019). Can digital technologies really be used to reduce inequalities? *OECD Development Matters*.

U.S. Department of Energy. (n.d.). *LED Lighting*.

Vachani, S., & Smith, N. C. (2008). Socially responsible distribution: Distribution strategies for reaching the bottom of the pyramid. *California Management Review*, 50(2), 52–84.

Valenzuela, J. P., Bellei, C., & Ríos, D. de los. (2013). Socioeconomic school segregation in a market-oriented educational system: The case of Chile. *Journal of Education Policy*, 29(2), 217–241.

Van Le, D., & Tran, T. Q. (2022). Does the private sector increase inequality? Evidence from a transitional country. *Structural Change and Economic Dynamics*, 62, 451–466.

Vernet, A., Khayesi, J. N. O., George, V., George, G., & Bahaj, A. S. (2019). How does energy matter? Rural electrification, entrepreneurship, and community development in Kenya. *Energy Policy*, 126, 88–98.

Viscidi, L. (2021). *Electric mobility in Central America*. IDB.

Vo, S. (2016). Concern for community: A case study of cooperatives in Costa Rica. *Journal of Community Practice, 24*(1), 56–76.

Wang, H., Otoo, N., & Dsane-Selby, L. (2017). *Ghana National Health Insurance Scheme: Improving financial sustainability based on expenditure review.* World Bank.

WHO & World Bank. (2017). *Tracking universal health coverage: 2017 global monitoring report*. WHO and World Bank.

Wong, M. D., & Buba, J. (2017). *Special economic zones: An operational review of their impacts.* World Bank Group.

World Bank. (2005). *Economic growth in the 1990s: Learning from a decade of reform.*

World Bank. (2013). *World development report 2013: Jobs*.

World Bank. (2016a). *Poverty and shared prosperity 2016: Taking on inequality*.

World Bank. (2016b). *World development report 2016: Digital dividends*.

World Bank. (2017a). *World development report 2017: Governance and the law*.

World Bank. (2017b). *OBA in infrastructure: The experience so far* (OBApproaches No. 54).

World Bank. (2017c). *Public-private partnerships reference guide (Version 3.0).*

World Bank. (2018a). *Overcoming poverty and inequality in South Africa: An assessment of drivers, constraints, and opportunities*.

World Bank. (2018b). *Malaysia's digital economy: A new driver of development.* World Bank Group.

World Bank. (2018c). *A guide for effective results-based financing strategies*. The Global Partnership on Output-Based Aid, World Bank.

World Bank. (2019a). *Promoting rural electrification in Peru* (Results Brief, May 13).

World Bank. (2019b). *Doing business 2019: Training for reform*.

World Bank. (2021a). *Innovative business models for expanding fiber-optic networks and closing the access gaps.* World Bank Group.

World Bank. (2021b). *World development report 2021: Data for better lives.*

World Bank. (2023). *Costa Rica SCD update.*

World Bank. (2024). *Poverty, prosperity, and planet report 2024: Pathways out of the polycrisis*.

Wright, L., & Hook, W. (2007). *Bus rapid transit planning guide*. Institute for Transportation and Development Policy.

Yap, J. T. (2014). *Addressing inequality in Southeast Asia through regional economic integration*. Institute of Developing Economies.

Zipline. (n.d.). *Ghana used instant delivery to build a better supply chain: How will it change public health?* Team Zipline Article.

Zwi, A. B., Brugha, R., & Smith, E. (2001). Private health care in developing countries. *BMJ*, 323(7311), 463–464.