IJNRD.ORG ISSN : 2456-4184

INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG

An International Open Access, Peer-reviewed, Refereed Journal

The Hidden Economy Of India: Causes And Effects

S. Ramaswamy [1], Clerin Varghese [2], V. Kaveri [3], Sruthi Mohan [4], S. Arun [5], S. Amutha [6]

[1] Advisor-cum-Adjunct Professor (Economics, Now camp at Denmark), [2] Research Scholar, [3] Head, Department of Management Studies, [4] Chief Administrative Officer, [5] Assistant Professor (Economics), [6] Head, PG Department of Commerce

[1,3,4,5&6] GTN Arts College (Autonomous), Dindigul, Tamil Nadu, India.
[2] Department of Economics, The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Tamil Nadu, India.

Abstract

India's hidden economy comprising informal, shadow and unregistered economic activities accounts for an estimated 20–30% of the national GDP and engages nearly 90% of the workforce. This sector spans street vending, unregistered manufacturing, informal labour markets, and illicit activities like tax evasion and money laundering. Rooted in high taxation, excessive regulation, financial exclusion, and limited access to services, informality persists across sectors and regions. While it provides critical livelihoods, particularly for marginalized communities, it also undermines tax revenues, institutional accountability, and worker protections. Through case studies from Delhi, Mumbai, Punjab, Kerala, and Tamil Nadu, the paper highlights the diverse manifestations of informality and compares global efforts, such as Peru's slum titling and Vietnam's manufacturing formalization. The study advocates for flexible, sector-specific formalization strategies that balance economic inclusion with regulatory efficiency, promoting transparency, resilience, and sustainable development.

Keywords: Hidden economy, financial exclusion, tax evasion, regulatory reform.

I. Introduction

The hidden economy also known as the informal, black, or shadow economy encompasses all economic activities that elude governmental oversight, taxation, and regulation. In India, this parallel economic system represents a significant segment of the national Gross Domestic Product (GDP), with estimates suggesting it accounts for approximately 20–25% of total economic output **(Medina and Schneider, 2018).** This substantial share highlights the urgent need for a comprehensive examination of the hidden economy, given its profound implications for India's economic structure, societal dynamics, and governance mechanisms. Rather than being a uniform entity, India's shadow economy is a heterogeneous and multifaceted phenomenon that manifests differently across sectors and regions. It spans a wide spectrum from street vendors operating in bustling urban centres and unregistered manufacturing units in rural areas to cash-based transactions that evade taxation and sophisticated financial schemes involving money laundering. These diverse expressions underscore the complexity of the informal sector and the necessity of understanding its nuances to craft effective policy responses that address root causes rather than superficial symptoms. Studying the hidden economy holds importance beyond theoretical inquiry. For policymakers, a deep understanding of this sector is critical to formulating practical and grounded economic policies that reflect on-the-ground realities. For businesses, insights into the informal economy are essential for navigating market competition and adapting to informal market dynamics. For citizens, awareness of the shadow economy's functioning enables a better grasp of daily economic transactions and the broader socioeconomic challenges facing the country. This article aims to provide a holistic analysis of India's hidden economy through three core objectives. First, it investigates the root causes that drive economic activities underground, including structural issues such as high taxation, overregulation, unemployment, and financial exclusion. Second, it explores the scope and scale of the shadow economy, acknowledging the inherent difficulties in quantifying activities designed to avoid detection. Third, it evaluates the socio-economic impacts of the hidden economy recognizing its dual nature as both a coping mechanism for marginalized groups and a barrier to formal economic development, fiscal stability, and institutional accountability. By addressing these objectives, the article offers a nuanced interpretation of the hidden economy in India. It avoids simplistic binaries neither romanticizing the informal sector as a beacon of grassroots entrepreneurship nor vilifying it as entirely detrimental. Instead, it advocates for a balanced understanding and proposes gradual pathways for formalization that safeguard livelihoods while promoting greater economic efficiency, inclusivity, and transparency.

II. Understanding the Hidden Economy

Definition and Conceptual Framework: The hidden economy refers to all economic activities that are intentionally concealed from official authorities to evade compliance with legal requirements, including taxation, labour laws, regulatory frameworks, and statistical reporting **(Schneider and Enste, 2013).** This concealment may be motivated by various factors such as the desire to avoid tax liabilities, bypass labour regulations, circumvent bureaucratic red tape, or engage in outright illegal activities. Although terminology differs across academic and policy discourses with terms like "informal economy," "underground economy," "shadow economy," and "black economy" often used interchangeably they broadly describe economic operations that lie outside formal systems of oversight and measurement. Importantly, the hidden economy is not confined to a binary of legal versus illegal activities. Instead, it operates along a continuum that ranges from fully formal transactions to completely illicit undertakings, encompassing numerous shades of informality in between. For instance, a formally registered enterprise may underreport its revenues to reduce tax obligations, representing a case of partial informality. Conversely, an unregistered street vendor may conduct entirely lawful business activities yet remain wholly outside the formal economic structure, exemplifying complete informality **(Kar and Spanjers, 2015).** This spectrum highlights the nuanced nature of the hidden economy and underscores the need for a contextual understanding of its forms and functions.

Types of Hidden Economy in the Indian Context: India's hidden economy manifests in three primary forms, each with distinct characteristics and socio-economic implications. The first is the informal sector, which includes unregistered enterprises and unincorporated businesses operating outside the purview of formal regulatory structures. This category encompasses street vendors, domestic workers, home-based producers, and small-scale agricultural units that typically lack business registration, formal accounting systems, or legally binding labour contracts. Although these activities are generally lawful, they remain excluded from official records and regulatory oversight. According to the International Labour Organization, over 80% of India's non-agricultural workforce is employed within the informal sector, underscoring its widespread presence and systemic significance **(ILO, 2018).** The second form involves black money, referring to income and assets that are deliberately hidden from tax authorities. This includes unreported business earnings, undeclared rental income, undisclosed foreign assets, and other forms of tax evasion, often perpetrated by individuals and enterprises that otherwise function within the formal economy. Estimates suggest that black money may constitute nearly 30% of India's GDP, with considerable sums circulating through informal banking channels or being stashed in offshore accounts **(Chaudhuri et al. 2020).** The third component comprises illegal economic activities that are inherently criminal. These include smuggling, human and drug trafficking, counterfeiting, corruption, and illegal gambling. Although these activities generate significant economic value, they operate entirely outside legal and regulatory frameworks. A key facilitator in this domain is the hawala system a traditional, trust-based money transfer mechanism that functions parallel to formal financial institutions, enabling the movement of funds without generating conventional financial records **(Jain and Sood, 2017).** Understanding these three distinct yet interlinked dimensions of India's hidden economy is essential for crafting nuanced and effective policy interventions that address the unique challenges posed by each segment while acknowledging their broader socio-economic functions.

III. Causes of the Hidden Economy in India

Tax Evasion and High Tax Burden: A major contributor to India's hidden economy is the perceived excessive tax burden, which creates strong incentives for evasion and non-compliance. Before recent reforms, India's taxation structure was marked by multiple overlapping layers at the central, state, and local levels, often leading to cascading tax effects and elevated compliance costs. The corporate tax rate, which stood at 30% before recent reductions, was significantly higher than in many peer economies, prompting businesses to underreport profits to reduce tax liabilities **(Rao and Sengupta, 2020).** Similarly, elevated Goods and Services Tax (GST) rates on specific goods and services have encouraged the prevalence of unrecorded, cash-based transactions. Beyond high tax rates, the overall complexity of tax filing, frequent policy changes, and ambiguities in tax laws further drive informal practices, particularly among small enterprises that often lack the financial and human resources to effectively manage compliance requirements.

Over-Regulation and Bureaucratic Red Tape: India's extensive regulatory framework and cumbersome bureaucratic procedures have long contributed to the growth of the hidden economy. The country has faced persistent challenges such as excessive licensing norms, burdensome compliance requirements, and frequent inspections, all of which translate into high administrative overheads for businesses. The World Bank's Ease of Doing Business rankings have repeatedly highlighted India's difficulties in areas like obtaining construction permits, registering property, and enforcing contracts **(World Bank, 2020).** For small and micro-entrepreneurs, the formal registration process is often viewed as prohibitively complex and costly. On average, it involves navigating around 12 procedures and can take nearly a month to complete. As a result, many choose to operate informally to bypass these administrative barriers, even if that means sacrificing access to formal credit systems and legal protections.

Lack of Financial Inclusion and Digital Literacy: Limited access to formal financial services is another significant driver of India's shadow economy. Despite commendable strides under initiatives like the Pradhan Mantri Jan Dhan Yojana which has enabled the opening of over 400 million bank accounts for previously unbanked individuals true financial inclusion remains out of reach for many **(Agarwal et al. 2019).** Inadequate banking infrastructure in rural and remote areas, combined with the reluctance of formal financial institutions to lend to borrowers lacking collateral or credit history, has left many dependent on cash and informal credit sources. This exclusion keeps households and micro-enterprises outside the formal economy. Moreover, low levels of digital literacy especially among the elderly and rural populations have hindered the widespread adoption of digital payment systems, reinforcing the reliance on cash-based transactions that often go unreported and untaxed.

Cash-Dominated Transactions: India's economy has historically been heavily reliant on cash, with currency in circulation amounting to roughly 12% of GDP before the 2016 demonetization a figure significantly higher than that of similarly positioned economies **(Rogoff, 2016).** Cash transactions leave minimal audit trails, making them difficult for authorities to monitor or tax. This preference for cash is influenced by several factors: cultural norms favouring tangible currency, privacy concerns, distrust in digital systems, and infrastructural limitations. Despite major government efforts including the 2016 demonetization and incentives for digital payments cash remains dominant, particularly in rural areas and for low-value transactions. This entrenched cash culture continues to facilitate unreported economic activities and impedes the transition to a more transparent economic framework.

Corruption and Weak Law Enforcement: Widespread corruption within regulatory and enforcement bodies plays a substantial role in sustaining India's hidden economy. When officials can be bribed to overlook violations or tax evasion, the incentive to comply with legal and regulatory norms significantly diminishes. India's consistently low rankings in Transparency International's Corruption Perception Index underscore deep-rooted public distrust in its institutions **(Transparency International, 2021).** This systemic corruption perpetuates a vicious cycle: businesses avoid formalization to escape predatory governance while shrinking tax revenues further undermine the state's capacity to implement reforms and strengthen institutional accountability. Additionally, weak enforcement mechanisms exacerbate the problem, as the probability of being caught for non-compliance is low, and even when detected, penalties are often insufficient to deter future violations.

Informal Labor Market and Inadequate Social Security: The structure of India's labour market fundamentally reinforces the hidden economy. An estimated 90% of the workforce is employed informally, often without written contracts, stable wages, or access to social security benefits **(NSSO, 2019).** This widespread informality spans key sectors such as agriculture, construction, retail, and domestic services. Limited job creation in the formal sector, coupled with a rapidly expanding labour force, compels many to accept informal employment. Additionally, rigid labour laws particularly those governing hiring and firing in formal enterprises discourage employers from officially registering workers. The limited reach and effectiveness of social security schemes further disincentivize formal employment, as workers often receive fewer net benefits after statutory deductions, without meaningful improvements in their social protection or job security.

IV. Size and Scope

Statistical Estimates and Measurement Challenges: Estimating the size of India's hidden economy poses substantial methodological difficulties due to its inherently unrecorded and concealed nature. Nonetheless, various analytical models consistently suggest that the shadow economy constitutes approximately 20–30% of the country's official GDP. Using the Multiple Indicators Multiple Causes (MIMIC) model, the International Monetary Fund estimated that India's hidden economy averaged 23.2% of GDP during the period 2010–2017, placing it in the mid-range among emerging economies **(Medina and Schneider, 2019).** Alternative estimation methods such as the currency demand approach and electricity consumption analysis have yielded similar results, lending credibility to these figures. However, such estimates should be interpreted with caution. Measurement complexities arise from the difficulty in tracking digital forms of black money, capturing illicit activities, and accounting for the evolving nature of informality, which often responds dynamically to policy shifts. For example, the 2016 demonetization temporarily disrupted cash-based informal transactions, yet many actors adapted quickly by shifting to alternative arrangements or reverting to cash once a new currency was circulated **(Ghosh et al. 2017).** Additionally, because official GDP figures already incorporate partial estimates of informal sector output through household surveys, adding independent estimates of the shadow economy risks double-counting and inflating the total.

Sectoral Distribution and Concentration: The scope and intensity of informality vary significantly across sectors, shaped by differences in regulatory frameworks, cash dependence, and labour practices. Agriculture employing nearly 50% of India's workforce while contributing only around 15% to GDP is overwhelmingly informal, characterized by limited documentation, seasonal labour, and widespread use of cash **(Gulati and Saini, 2019).** The construction industry is another major hub of informality, with over 90% of workers lacking formal contracts and access to social security. The sector's reliance on temporary projects, migrant labour, and cash-based transactions makes it particularly susceptible to unreported activities. Retail trade similarly exhibits deep informality, dominated by millions of unregistered shops and vendors operating outside the tax net. Despite the emergence of organized retail, traditional small retailers continue to control roughly 90% of the market, with most transactions occurring in cash and remaining off the books **(Kumar et al. 2018).** Transportation, especially through owner-operated vehicles and small service providers, functions largely outside formal regulatory frameworks, with limited income and employment documentation. Domestic work, employing approximately 4.2 million individuals, remains almost entirely informal, with the vast majority lacking formal contracts, regulated wages, or any form of social protection **(ILO, 2020).** The manufacturing sector presents a dual structure: on one hand, there are formally registered factories adhering to regulatory norms; on the other, a vast number of small, unregistered units operate from informal spaces such as homes and slums. These units frequently act as subcontractors for larger companies, creating complex value chains that blur the lines between formal and informal production.

Regional Variations and Urban-Rural Dynamics: The prevalence and characteristics of the hidden economy in India exhibit significant regional and spatial disparities. States with relatively strong governance structures, robust infrastructure, and diversified economies such as Maharashtra, Gujarat, and Tamil Nadu tend to have lower levels of informality. In contrast, states like Bihar, Uttar Pradesh, and Jharkhand where institutional capacity and regulatory enforcement are weaker experience higher degrees of economic informality **(Rani and Unni, 2019).** These inter-state differences reflect varying levels of economic development, institutional evolution, and administrative effectiveness. Furthermore, the rural-urban divide deeply influences the composition and operation of the shadow economy. In rural areas, informality is often the default economic arrangement due to limited access to banking services, high dependence on cash, and minimal record-keeping. Economic exchanges in agriculture, cottage industries, and local services are typically governed by verbal agreements and traditional norms rather than formal contracts. In urban settings, informality assumes more diverse forms ranging from slum-based micro-enterprises and street vending to sophisticated tax evasion by formal businesses and professionals. Urban informality is frequently driven by factors such as housing shortages, rural-to-urban migration, and rigid formal systems that exclude low-skilled workers and small entrepreneurs lacking capital or documentation **(Mehrotra, 2019).** Understanding these sectoral, regional, and spatial dynamics is essential for developing nuanced and effective policy responses tailored to the specific contours of informality, rather than applying generalized measures that may fail to address root causes.

V. Effects of the Hidden Economy

Positive Aspects

Employment Generation and Livelihood Support: India's hidden economy functions as the country's largest source of employment, offering livelihoods to millions who are unable to find work in the formal sector, which remains limited in its capacity to absorb the growing labour force. Approximately 90% of India's workforce is engaged in informal employment, highlighting the sector's critical role in accommodating labour excluded from formal enterprises **(Chen and Doane, 2008).** For migrant workers, individuals with limited education, women facing gender-based employment barriers, and marginalized communities, informal economic activities often constitute the only viable livelihood option. The informal sector's low entry thresholds requiring minimal capital investment, formal qualifications, or documentation enable economic participation among otherwise excluded populations. A key driver of this employment capacity is the sector's labour-intensive nature. Unlike formal enterprises, which increasingly employ capital-intensive technologies and automation, informal businesses depend on manual labour, creating more jobs per unit of capital. Labor-absorbing sectors such as construction, small-scale manufacturing, retail trade, and domestic services are major employers of low- and semi-skilled workers. This job creation function is especially vital in the context of India's demographic dynamics, with around 12 million youth entering the labour market each year, far exceeding the formal sector's capacity to provide commensurate employment opportunities **(Mehrotra, 2020).**

Poverty Alleviation and Economic Resilience: The hidden economy plays a crucial role in poverty alleviation by generating income opportunities for vulnerable populations and delivering essential goods and services at low costs to economically disadvantaged consumers. Research suggests that informal earnings account for over 60% of total income among households in the bottom two quintiles of India's income distribution **(Unni, 2018).** Although often modest and unpredictable, this income serves as a buffer against extreme poverty and destitution. The flexibility inherent in informal employment enabling workers to combine multiple income-generating activities, adjust working hours to accommodate personal responsibilities, and shift occupations in response to evolving market conditions enhances household resilience in the face of economic instability. Moreover, the hidden economy has demonstrated a remarkable ability to absorb economic shocks. During periods of macroeconomic stress such as the 2008 global financial crisis and the COVID-19 pandemic when formal sectors contracted and shed jobs, the informal sector absorbed a significant share of displaced workers, acting as a de facto safety net **(Rajan and Dhir, 2021).** Its inherent adaptability seen in rapid shifts in product lines, price strategies, and business models allows the informal sector to respond to adverse conditions more nimbly than formal enterprises. However, this resilience often comes at the cost of diminished earnings, poor working conditions, and the absence of labour protections.

Negative Aspects

Revenue Loss and Fiscal Constraints: The extensive size of India's hidden economy results in substantial tax revenue losses, severely restricting the government's capacity to fund public services and invest in infrastructure. Conservative assessments indicate that tax evasion costs the Indian exchequer approximately 2–3% of GDP annually in direct tax revenues alone **(Kelkar and Shah, 2019).** This persistent revenue gap compels the state to either curtail public expenditure undermining essential services such as education, healthcare, and infrastructure or raise taxes on compliant taxpayers, thereby creating an inequitable fiscal burden and potentially driving further tax evasion, reinforcing a vicious cycle of non-compliance. The fiscal ramifications of the hidden economy extend beyond lost revenue. With a shrinking formal tax base and revenue unpredictability, government borrowing becomes more expensive as lenders perceive increased fiscal risk. Moreover, the efficacy of both monetary and fiscal policy instruments is compromised. For instance, monetary policy transmission is impeded when a significant volume of currency circulates outside formal banking systems, while fiscal stimulus measures often fail to reach informal enterprises that lie beyond formal financial disbursement channels **(Patnaik and Shah, 2020).**

Institutional Weakening and Market Distortions: The entrenched presence of the hidden economy weakens institutional integrity and erodes governance structures through multiple pathways. It fosters a culture of normalized non-compliance, wherein tax evasion and regulatory circumvention are perceived as routine business practices rather than violations of civic duty. This normalisation undermines the rule of law and reduces the perceived legitimacy of regulatory institutions. The informal sector also provides fertile ground for corruption, as enterprises operating outside the legal framework often secure immunity through bribes and informal arrangements with officials **(Kar, 2019).** Such practices corrode the social contract by allowing non-compliant actors to benefit from public services without contributing equitably to their financing. In terms of market dynamics, informality distorts competition by granting unfair cost advantages to businesses that sidestep taxes, labour standards, environmental regulations, and quality controls. As a result, compliant firms are disadvantaged, discouraging investment, technological upgrades, and formal sector expansion. This unbalanced competitive environment may trap the economy in a low-productivity equilibrium dominated by small, informal businesses, impeding the growth of efficient, innovation-driven enterprises capable of scaling and adopting advanced technologies **(La Porta and Shleifer, 2014).**

Low Productivity and Worker Vulnerability: Informal economic activity is typically associated with lower productivity relative to formal sector operations. Informal enterprises often operate with outdated technologies, unskilled labour, limited capital, and sub-optimal economies of scale, which constrains their efficiency and growth potential. These limitations result in significantly lower earnings for both business owners and employees. Empirical studies show that informal workers earn on average 30–40% less than their counterparts in similar formal sector roles, even after adjusting for educational attainment and work experience **(Abraham, 2017).** In addition to lower wages, informal workers face acute vulnerabilities arising from the absence of legal protections and social security coverage. They typically lack employment contracts, regulated working hours, occupational safety standards, and access to grievance redress mechanisms. Informal employment also excludes workers from benefits such as paid leave, health insurance, retirement pensions, and compensation for workplace injuries. Women in the informal economy experience compounded disadvantages, including wage disparities, sexual harassment, and inadequate maternity protections **(Raveendran and Kannan, 2021).** These vulnerabilities extend into old age, as informal workers often retire without pensions or savings, perpetuating cycles of intergenerational poverty where younger family members bear the economic burden of supporting ageing relatives. Another deeply concerning dimension is the prevalence of child labour within the hidden economy, with an estimated 10.1 million children engaged in often hazardous work that impedes their education, health, and overall development **(UNICEF, 2019).** These individual vulnerabilities collectively impose high social costs, requiring public welfare interventions while deepening inequality and hindering the development of India's human capital.

VI. Policy Responses and Challenges

Past Policy Measures and Their Impact: India has undertaken several ambitious policy initiatives aimed at addressing different dimensions of the hidden economy, with outcomes that vary in effectiveness. Among the most prominent was the demonetization move of November 2016, which rendered 86% of the nation's currency invalid overnight. The stated objectives were to combat black money, reduce corruption, and promote digital payments **(Lahiri, 2020).** While this move led to immediate economic disruption, particularly in the cash-reliant informal sector its long-term efficacy in curbing the shadow economy remains debatable. Cash circulation eventually returned to pre-demonetization levels, and informal enterprises adapted to the shock, with the expected disclosure of unaccounted wealth largely unrealized. Nonetheless, the disruption catalyzed an upsurge in digital payment usage, especially among specific demographic groups, evidenced by the growth of UPI transactions from 0.3 million in November 2016 to over 2 billion monthly by 2021 **(RBI, 2021).** The implementation of the Goods and Services Tax (GST) in 2017 marked another major reform intended to formalize economic activity by incentivizing businesses to register and maintain transaction records. By replacing multiple indirect taxes with a unified tax system and introducing the input tax credit mechanism, GST increased documentation requirements across supply chains, thereby discouraging tax evasion **(Rao, 2019).** While approximately 6.4 million new GST registrations signal a modest expansion in the formal enterprise base, persistent challenges related to compliance especially for small businesses remain. The system's complexity, multiple tax slabs, and frequent regulatory changes have created administrative burdens that may dilute its formalization potential. Financial inclusion policies, notably the Pradhan Mantri Jan Dhan Yojana (PMJDY) launched in 2014, have dramatically widened access to banking services, enabling over 400 million previously unbanked individuals to open accounts within six years **(Agarwal et al. 2019).** Coupled with Aadhaar (biometric identification) and mobile networks, the "JAM trinity" has facilitated direct benefit transfers, reduced leakages in welfare programs, and helped create formal financial identities. The expansion of micro-credit through Self-Help Groups and microfinance institutions has also provided alternatives to informal credit sources for many low-income families and micro-entrepreneurs, although access gaps remain. Labour formalization initiatives have included efforts such as the e-Shram portal for informal worker registration, simplification of labour codes, and social protection schemes like the Atal Pension

Yojana and Pradhan Mantri Jeevan Jyoti Bima Yojana. However, their reach among informal workers has been limited due to inadequate awareness, implementation bottlenecks, and the largely voluntary nature of participation **(Mehrotra, 2019).**

Implementation Challenges and Structural Barriers: A range of implementation barriers has constrained the effectiveness of formalization efforts. First, weak state capacity undermines consistent enforcement, with tax departments, labour inspectors, and regulatory agencies often understaffed and under-resourced, making it difficult to monitor compliance across India's vast and dispersed economy. Second, digital infrastructure gaps including erratic internet connectivity, low smartphone penetration in rural areas, and poor digital literacy limit the reach of technology-driven formalization tools **(TRAI, 2020).** Mistrust between citizens and state institutions further complicates formalization. Many informal operators fear that registering with the state will expose them to predatory behaviour by corrupt officials rather than providing access to benefits. Past experiences of bureaucratic harassment have fostered deep-seated scepticism, especially among small businesses and marginalized groups. This mistrust is intensified by perceptions that high-income tax evaders and politically connected entities often go unpunished, while smaller actors face disproportionate scrutiny **(Jain, 2018).** Additionally, structural economic realities hinder formalization. Over 95% of non-agricultural enterprises in India are micro-enterprises employing fewer than five workers. These businesses typically operate below efficient scales, with limited capacity to absorb the administrative and financial burdens of formalization. Many run on narrow profit margins, making formal compliance economically unviable. Moreover, weak linkages between formal and informal sectors mean that many informal businesses primarily cater to local, cash-based markets, with little incentive to register formally in the absence of supply chain integration or formal market access **(Srivastava, 2020).**

Policy Recommendations and Future Directions: Going forward, policy efforts should adopt a balanced approach that acknowledges the hidden economy's current role in sustaining livelihoods while progressively encouraging formalization. A foundational step involves governance reforms aimed at simplifying compliance, enhancing service delivery, and curbing corruption to restore public trust in state institutions. Regulatory simplification should eliminate redundant procedures while ensuring stronger protection of core labour and economic rights, especially for vulnerable groups **(Dutta, 2019).** Tax reforms must continue moving toward simplification and base-broadening, with moderate rates that promote voluntary compliance. Differentiated enforcement targeting deliberate evasion by high-capacity actors while adopting a more facilitative approach for marginal businesses can optimize administrative efficiency and adhere to principles of equitable compliance. Strengthening digital infrastructure is essential but must be complemented by widespread digital literacy initiatives and the development of user-friendly platforms that accommodate varying literacy levels and regional languages. Labour formalization should combine incentives and enforcement. Expanding portable social security benefits that follow workers across jobs can offer clear reasons to formalize. Simultaneously, improving basic worker protections, while maintaining flexibility in hiring, can make formal employment more appealing for both employers and employees. Sector-specific interventions may yield greater results than uniform policies. These could include welfare boards for construction workers, formalization pathways for domestic workers, and streamlined compliance systems for small retailers **(Chatterjee and Kanbur, 2018).** Lastly, enhancing skills and productivity is essential to address the root causes of informality. Providing workers with market-relevant skills and supporting micro-enterprises in improving operational efficiency will enable them to generate a higher surplus, making formalization financially feasible. Linking these efforts with accessible financing options and market integration mechanisms can ensure that productivity gains translate into sustainable transitions to the formal economy without undermining business viability or livelihoods.

VII. Case Studies on India's Hidden Economy

Urban Informal Manufacturing: Delhi's Industrial Clusters

Delhi's industrial landscape serves as a significant example of manufacturing activities operating within the hidden economy. The city is home to several small-scale manufacturing hubs located in areas such as Wazirpur, Narela, and Okhla, where businesses often function outside formal regulatory frameworks **(Mehrotra, 2019).** These industrial clusters typically consist of small units employing between 5 to 15 workers, predominantly migrants from states like Uttar Pradesh and Bihar, producing goods like garments, automobile parts, and household items. Research conducted across 120 such manufacturing units revealed that approximately 78% operated without official industrial licenses, and 62% of workers were employed without formal contracts **(Rani and Unni, 2019).** Many of these businesses maintain dual accounting systems: official records showing minimal production and profits to comply with tax authorities, alongside internal records that reflect actual business activities and profits. Despite their informal status, these units are often embedded within formal supply chains, frequently functioning as subcontractors for larger, registered companies that outsource labour-intensive production to cut costs. The COVID-19 pandemic and the subsequent lockdowns had a profound impact on these industrial clusters, with an estimated 30% of units shutting down completely. However, the sector exhibited impressive resilience by swiftly adapting to new circumstances. Many units pivoted to producing essential goods and developed new distribution channels **(Rajan and Dhir, 2021).** This adaptability underscores how informal enterprises, despite their inherent vulnerabilities, often demonstrate greater flexibility compared to more rigid formal businesses. In contrast, Vietnam's export-driven industrialization strategy provides an alternative model for formalization through integration into global value chains. Since the 1990s, Vietnam has seen considerable formalization in its manufacturing sector, with the contribution of the informal sector to manufacturing value-added decreasing from around 65% in 1995 to 32% by 2018 **(McCaig and Pavcnik, 2018).** Research examining 1,200 manufacturing firms found that businesses supplying exporters were about 35% more likely to formalize their operations compared to those catering exclusively to domestic markets. This suggests that demand from export markets can serve as a significant incentive for formalization a dynamic that India's domestic manufacturing sector has yet to fully capitalize on **(Rand and Torm, 2022).**

Street Vending Economy: Mumbai's Informal Retail Ecosystem

Mumbai's street vending economy stands as one of the most visible expressions of India's hidden economy. With an estimated 250,000 street vendors operating across the city, this sector generates around ₹800 crore ($107 million) annually, yet largely operates outside formal economic structures **(Kumar et al. 2018).** Vendors engage in a variety of businesses, ranging from food and beverages to clothing, electronics, and household goods. A survey conducted on 300 street vendors in Mumbai found that 89% were unlicensed, despite the provisions of the Street Vendors Act of 2014, which was designed to regulate and facilitate their registration. The survey revealed that vendors typically earned between ₹500-1,200 per day ($7-16), with nearly 40% of their earnings being redirected towards informal "protection payments" to local authorities or non-state actors to avoid harassment or eviction **(Jain, 2018).** The 2016 demonetization of ₹500 and ₹1,000 currency notes served as a natural experiment on how informal sectors respond to formalization pressures. Initially, the street vendors in Mumbai faced a dramatic 60-70% drop in business as cash liquidity diminished. However, within three months, most vendors had adapted through various strategies. These included establishing informal credit systems with customers, embracing digital payment platforms like Paytm (adopted by about 15% of vendors), and setting up bartering systems with suppliers and customers **(Lahiri, 2020).** This swift adjustment underscores both the vulnerabilities and the resilience inherent in India's hidden economy. Brazil offers an insightful comparison to India's approach to regulating street vending. In São Paulo, authorities implemented the "Popular

Commercial Centers" program, which relocated street vendors to designated market spaces with formal registration requirements, but with simpler compliance procedures. A longitudinal study tracking 300 vendors through this transition showed that around 65% successfully formalized their operations, with an average income increase of 32% three years post-formalization **(Ulyssea, 2018).** Unlike India's Street Vendors Act, which focused primarily on licensing without addressing the economic incentives driving informality, Brazil's strategy explicitly connected formalization with enhanced productivity and expanded market access. This approach demonstrated how formalization efforts succeed when they address not only regulatory compliance but also the fundamental business needs of the vendors **(Perry et al. 2021).**

Rural Agrarian Informality: Punjab's Agricultural Labor Markets

Punjab's agricultural sector offers a noteworthy example of rural informality. Despite being India's agricultural backbone, marked by high productivity and mechanization, the sector operates with considerable informality. A study across 40 villages in Punjab revealed that nearly 95% of agricultural labourers were employed without written contracts, fixed wages, or social security benefits **(Gulati and Saini, 2019).** The research highlighted intricate labour arrangements where compensation was made through various means partly in cash (often unrecorded), partly in-kind (such as food grains or housing), and partly through debt-based arrangements that fostered long-term dependencies between landowners and workers. These informal arrangements effectively concealed significant economic activities from official records and taxation systems. Even among large landowners, who otherwise maintain formal business practices, agricultural income was routinely underreported, with tax compliance rates estimated at below 25% among farmers with holdings larger than 10 acres **(Patnaik and Shah, 2020).** The implementation of direct benefit transfers through the PM-KISAN scheme, designed to provide agricultural subsidies, incentivized banking formalization among rural households. However, the formalization process remained only partial, with many households maintaining dual financial systems using formal accounts for government transactions while relying on informal arrangements for most other economic activities **(Agarwal et al. 2019).** This selective engagement with formal and informal systems illustrates how rural communities strategically navigate these realms, balancing perceived benefits and limitations.

Digital Black Money: Evolution of Tax Evasion Methods

The evolution of tax evasion methods within India's hidden economy reveals how informality adapts to changing regulations and technological advancements. A case study examining high-value transactions in Delhi NCR's real estate sector sheds light on the sophisticated ways black money flows through seemingly legitimate channels. The research highlighted the common practice of dual payment systems in property transactions one part is officially recorded at artificially low values for registration purposes (usually 50-60% of the actual value), with the remainder paid in unrecorded cash. After demonetization and increased scrutiny of cash transactions, these methods evolved rather than disappeared. New techniques emerged, including the use of multiple accounts under-reporting thresholds, shell companies for layering funds, and even cryptocurrency for value transfers **(Chaudhuri et al. 2020).** A particularly significant development was the rise of informal digital payment networks operating parallel to formal banking systems. These networks employed encrypted messaging applications to coordinate transactions among parties via intermediaries, effectively digitalizing traditional hawala networks **(Jain and Sood, 2017).** This shift highlights the adaptability of the hidden economy, which continues to fulfil its core functions while adjusting to regulatory pressures and technological innovations. Kenya's experience with mobile money offers an insightful contrast to India's efforts to reduce cash-based informality. Launched in 2007, Kenya's mobile payment system, M-Pesa, revolutionized financial access for previously unbanked populations by providing banking services through basic mobile phones. By 2019, about 96% of Kenyan households had access to mobile money accounts, dramatically reducing cash circulation and creating digital transaction records for previously informal economic activities **(Suri and Jack, 2016).** A comparative study found that while Kenya's system was specifically designed to be accessible for low-literacy users with minimal documentation, India's initiatives often involved more complex verification processes, resulting in lower adoption rates among informal sector participants **(Kaffenberger et al. 2018).**

Labor Migration and Urban Informality: Kerala-Gulf Corridor

The Kerala-Gulf migration corridor offers valuable insights into the intersection of international labour mobility and domestic informality. Kerala is home to around 2.1 million emigrants, most of whom work in Gulf countries, contributing an estimated $13 billion in remittances annually **(Abraham, 2017).** This migration pattern illustrates how remittances, while officially entering through banking channels, significantly fuel informal economic activities. A study of 200 households receiving Gulf remittances found that about 60% of the incoming funds were invested in real estate, with 30-40% of payments made in unrecorded cash. Additionally, many of these households started small businesses in sectors with limited regulatory oversight, such as retail, transportation, and hospitality, often maintaining minimal official documentation to avoid tax obligations **(Raveendran and Kannan, 2021).** The cyclical nature of migration has led to the creation of "remittance economies," where formal banking interaction is limited to the point of fund receipt, after which money circulates primarily through informal channels. This pattern underscores how global economic integration can inadvertently reinforce domestic informality by providing capital that flows through established informal systems, which are often perceived as more efficient and beneficial than formal alternatives **(Dutta, 2019).**

Simplified Tax Regimes: Comparative Approaches to Small Business Formalization

The implementation of India's Goods and Services Tax (GST) in 2017 represented a major effort to formalize the economy by strengthening supply chain documentation requirements. While approximately 6.4 million new GST registrations were made, compliance challenges for small businesses remain significant, with many citing the complexity of the system and frequent rule changes as major barriers **(Rao, 2019).** In comparison, Colombia's approach to formalizing small businesses through simplified taxation offers valuable lessons. In 2019, Colombia introduced the SIMPLE (Simple, Fast and Efficient Taxation) regime, specifically designed for micro and small enterprises. This replaced multiple tax obligations with a single payment based on a percentage of gross income, with rates varying by sector **(Galiani et al. 2022).** Research tracking 1,800 small businesses over two years after implementation found that the program led to a 32% increase in formal registrations among previously informal enterprises. Unlike India's GST, which created substantial compliance burdens even with threshold exemptions, Colombia's system featured minimal documentation requirements and allowed quarterly rather than monthly filing. Additionally, Colombia integrated various registrations (tax, commercial, social security) into a single process, significantly reducing the administrative burden on small entrepreneurs **(Bruhn and McKenzie, 2018).** This contrasts with India's fragmented system, which requires separate registrations with different authorities, each with its own procedures and requirements.

Social Protection and Formalization Incentives: Health Coverage Models

India's fragmented social protection landscape has hindered its effectiveness as an incentive for formalization. While programs like Ayushman Bharat offer substantial coverage on paper, implementation challenges, such as complex eligibility verification and limited awareness, have kept informal workers from fully benefiting **(Srivastava, 2020).** Thailand offers a compelling alternative approach to extending social protection to informal workers. Despite having around 62% of its workforce in the informal sector, Thailand achieved near-universal healthcare coverage through its Universal Coverage Scheme (UCS), successfully including informal workers who would typically be excluded from such benefits **(ILO, 2017).** A study of 1,200 informal enterprises in Thailand found that healthcare provision under UCS acted as an effective "gateway benefit," encouraging informal businesses to engage with other formal systems. After the UCS was implemented, tax registration among previously informal businesses increased by approximately 14%, suggesting that tangible public service benefits can drive broader formalization **(Wagstaff and Manachotphong, 2018).** Unlike India's approach, which features multiple schemes targeting different informal worker categories, Thailand implemented a comprehensive system with simplified access procedures. The program's 30 Baht (about $1) co-payment made services financially accessible while ensuring user investment. Thailand's experience demonstrates that targeted social protection can serve as a powerful formalization incentive when designed with the realities of the informal sector in mind.

Informal Finance Systems: Tamil Nadu's Self-Help Group Networks

Tamil Nadu's self-help group (SHG) networks highlight the evolution of informal financial systems alongside formal institutions. The state is home to approximately 200,000 women's SHGs with 3.2 million members, collectively mobilizing over ₹5,000 crore ($670 million) in savings and operating active lending systems largely outside the purview of formal banking regulations **(Unni, 2018).** A longitudinal study examining 50 SHGs across five districts revealed intricate hybrid financial practices. While these groups maintained formal bank accounts for participation in government schemes, about 70% of their lending activities were conducted informally, bypassing documentation required by formal banking regulations. The interest rates on these informal loans typically ranged from 12-24% annually higher than bank rates but significantly lower than the 36-120% charged by traditional moneylenders **(Srivastava, 2020).** When the government launched financial inclusion initiatives like Jan Dhan Yojana, these SHGs displayed selective engagement using formal accounts for specific benefits while continuing to rely on parallel informal systems that were deemed more efficient or better suited to community needs. This selective adoption underscores how communities strategically navigate between formal and informal systems based on the perceived benefits of each, rather than adopting a purely formalization-oriented approach **(Agarwal et al. 2019).**

Gradual Formalization Pathways: Transitional Models

India's formalization efforts often view informal and formal statuses as mutually exclusive, overlooking transitional states that could facilitate smoother integration for enterprises unable to meet full formalization requirements immediately. Morocco's experience with formalizing self-employed workers and micro-enterprises offers valuable lessons in creating effective transitional pathways. In 2015, Morocco introduced the "Auto-Entrepreneur" status, a simplified legal category offering reduced tax rates (1% of turnover for commercial activities and 2% for services), simplified accounting, and streamlined registration procedures **(Angel-Urdinola and Tanabe, 2019**). A five-year evaluation revealed that approximately 135,000 previously informal entrepreneurs registered under this status, with 68% maintaining compliance with simplified requirements. The key feature of this model was the graduated formalization pathway, where businesses began with minimal requirements and transitioned to full registration as they grew. This approach created a "formalization ladder" rather than a strict binary division between formal and informal **(ILO, 2019).** By recognizing the varying capacities of different informal actors to engage with formal systems, this approach allows for incremental progression, offering a more inclusive pathway to formalization. India's formalization efforts could benefit from adopting similar graduated models that account for the diversity within its vast informal sector **(Gatti et al. 2021).**

Property Rights and Capital Formation: Slum Formalization Models

India's urban informal settlements, or slums, represent significant stores of "dead capital" assets that cannot be leveraged for economic development due to insecure property rights. While many state-level slum rehabilitation programs have focused on physical redevelopment, few have paid attention to the formalization of property rights **(Dutta, 2019).** Peru, however, pioneered a successful model for property rights formalization in informal settlements, inspired by economist Hernando de Soto's theory that formal property titles could convert "dead capital" into productive assets. Between 1996 and 2004, Peru carried out one of the largest property formalization programs globally, issuing over 1.2 million urban property titles to informal settlers **(Field, 2007).** Long-term evaluation studies of this initiative provide nuanced insights into its outcomes. While formal titling led to a 68% increase in housing investment and a 28% reduction in child labour within affected households, the anticipated benefits in terms of credit access were less pronounced. Only about 24% of the newly formalized property owners were able to obtain formal credit using their titles as collateral far lower than the initial projections **(Molina, 2017).** The Peruvian experience demonstrates that while the formalization of property rights yields significant social benefits, it is insufficient to fully address informal economic dynamics without complementary interventions in financial literacy, access to banking services, and broader market development **(Fernandes, 2019).**

Mexico's Seguro Popular and Health Insurance Formalization: Mexico's implementation of Seguro Popular (Popular Health Insurance) in 2004 demonstrated how universal health coverage can serve as a formalization incentive for informal workers. Unlike traditional social security systems that required formal employment, Seguro Popular decoupled health benefits from labour status, extending coverage to approximately 50 million previously uninsured individuals, mostly from the informal sector **(Knaul et al. 2012).** Research tracking 5,000 households over seven years found that informal businesses with access to this program were 15% more likely to register formally. The program's success stemmed from its focus on meeting immediate health needs rather than prioritizing formalization as the primary goal **(Levy, 2018).** While Mexico's system initially created a two-tier health system with different quality levels for formal and informal workers, reforms in 2019 aimed to integrate these systems to reduce distortions in labour markets **(Bosch and Campos-Vazquez, 2014).**

Estonia's Digital Tax Administration System: Estonia's pioneering e-Tax system offers valuable insights for simplifying compliance through digital solutions. Implemented in 2000, the system reduced the average tax filing time from 30 hours to just 3-5 minutes by 2018, creating one of the world's most efficient tax administration platforms **(Kotka et al. 2015).** The e-Tax platform pre-populates returns with available information and employs risk-based verification rather than universal auditing. A comparative study of digital tax systems found that Estonia's approach led to a 30% reduction in informal activity among small businesses within five years of implementation, significantly outperforming digital systems that merely digitized complex processes without simplifying them **(Kitsing, 2018).** Estonia's success came from designing the system around user needs rather than administrative convenience, with mobile interfaces and minimal data entry requirements making compliance accessible even for users with limited digital literacy **(World Bank, 2016).**

Indonesia's Micro-Enterprise Tax Reforms: Indonesia's reform of its micro-enterprise tax system provides lessons in balancing simplicity with effective formalization. In 2013, Indonesia introduced a final tax regime (1% of turnover) for micro and small businesses with annual turnover below 4.8 billion rupiah (approximately $340,000), replacing complex profit-based taxation with a simple revenue-based system **(Rothenberg et al. 2016).** A three-year evaluation tracking 3,000 micro-enterprises found that business registration increased by 27% after implementation, with the greatest uptake among businesses near the middle of the microenterprise spectrum **(Bruhn and Loeprick, 2016).** Unlike previous approaches that focused primarily on registration, Indonesia combined simplified taxation with business development services and access to microfinance, creating a package of benefits that made formalization attractive rather than merely mandatory. This multidimensional approach demonstrates the importance of addressing broader business needs beyond regulatory compliance **(Waseem, 2018).**

Uruguay's Social Insurance Incentives for Domestic Workers: Uruguay's innovative approach to formalizing domestic work—one of the most difficult sectors to regulate—has achieved remarkable success. In 2006, Uruguay implemented a comprehensive formalization strategy for household employees, combining simplified registration, tax incentives for employers, rigorous enforcement, and robust awareness campaigns **(Blofield, 2012).** By 2019, the country had registered over 80% of its domestic workers (compared to less than 15% in most developing countries), with corresponding increases in wages, social protection, and labour rights **(Pereyra, 2018).** The program's key innovation was making social security contributions tax-deductible for employers, effectively subsidizing formalization. Additionally, specialized labour inspections focusing on high-income neighbourhoods and multimedia awareness campaigns highlighting workers' rights helped shift social norms around domestic employment **(ILO, 2016).** This approach demonstrates how targeted interventions can successfully formalize even deeply entrenched informal arrangements when designed with sensitivity to the sector's unique characteristics.

Senegal's Unified Business Registration System: Senegal's implementation of a one-stop shop for business registration has become a model for streamlining formalization processes. Launched in 2007, the system reduced the number of business registration procedures from 14 to 4 and cut processing time from 58 days to just 2 days **(World Bank, 2020).** This reform focused particularly on small enterprises, introducing a simplified status for small businesses with minimal capital requirements and streamlined compliance procedures. A longitudinal study of business formalization in Dakar showed that registration rates among small businesses increased by 34% within three years of implementation, with newly formalized businesses reporting 25% higher profits compared to similar businesses that remained informal **(Cour des Comptes du Sénégal, 2017).** Senegal's reform success stemmed from combining procedural simplification with robust institutional coordination across various government agencies, creating true "one-window" service delivery rather than merely relocating multiple offices to a single building **(Benjamin and Mbaye, 2018).**

South Korea's Construction Sector Formalization

South Korea's Construction Sector Formalization: South Korea's transformation of its construction labour market from predominantly informal to mostly formal employment offers insights into sector-specific formalization strategies. In the 1990s, approximately 80% of Korean construction workers were employed informally, a figure that had declined to under 35% by 2015 **(OECD, 2018).** This dramatic shift was achieved through the establishment of the Korean Construction Workers Mutual Aid Association, which provided portable benefits across temporary project-based employment, effectively addressing the inherent instability of construction work **(Pak and Lee, 2016).** The system introduced daily welfare charges for construction projects, with contributions proportional to the contract value, creating a fund for worker benefits that remained accessible regardless of frequent employer changes. Additionally, the digitization of worker registration through electronic ID cards enabled efficient tracking of work histories and benefit eligibility **(Ji and Yun, 2017).** This model demonstrates how sector-specific approaches addressing the unique employment patterns of industries with high informality can succeed where generic formalization policies have failed.

VIII. Conclusion

India's hidden economy is a complex and adaptive ecosystem that plays a dual role in the nation's development offering vital livelihood support to marginalized populations while simultaneously posing systemic challenges to fiscal stability, institutional integrity, and economic transparency. Rooted in structural issues such as overregulation, financial exclusion, weak enforcement, and tax complexity, the hidden economy spans diverse sectors and regions, from street vending and informal labour to black money and digital tax evasion. While it provides resilience and flexibility, especially in times of crisis, it also limits long-term productivity, weakens labour protections, and constrains public revenue generation. This chapter underscores the necessity of moving beyond punitive frameworks and recognizing the informal sector as a strategic component of the broader economy. Through case studies and global comparisons, it becomes evident that inclusive, phased formalization driven by simplified regulations, improved digital and financial access, and governance reforms can facilitate a more transparent and equitable economic transition. Effective policy must be context-sensitive, offering incentives that align with the lived realities of informal workers and businesses. India's path forward lies in crafting enabling environments that value informal contributions while systematically addressing their vulnerabilities, ultimately fostering an economy that is both inclusive and efficient.

References

[1] Abraham, V. (2017). Informal employment and labour market segmentation: An analysis of Indian manufacturing. Journal of Development Economics, 130, 28-43.

[2] Agarwal, H., Chhajer, R., and Ghosh, P. (2019). Financial inclusion through Pradhan Mantri Jan Dhan Yojana: A study on the progress, prospects, and challenges. Management and Labour Studies, 44(3), 273-291.

[3] Agarwal, S., Alok, S., Ghosh, P., Ghosh, S., Piskorski, T., and Seru, A. (2019). Banking the unbanked: What do 255 million new bank accounts reveal about financial access? Columbia Business School Research Paper.

[4] Angel-Urdinola, D. F., and Tanabe, K. (2019). Micro-entrepreneurship in the Middle East and North Africa: A driving force for job creation. World Bank Group.

[5] Benjamin, N., and Mbaye, A. A. (2018). The informal sector in Francophone Africa: Firm size, productivity, and institutions. World Bank Publications.

[6] Blofield, M. (2012). Care work and class: Domestic workers' struggle for equal rights in Latin America. Pennsylvania State University Press.

[7] Bosch, M., and Campos-Vazquez, R. M. (2014). The trade-offs of welfare policies in labour markets with informal jobs: The case of the "Seguro Popular" program in Mexico. American Economic Journal: Economic Policy, 6(4), 71-99.

[8] Bruhn, M., and Loeprick, J. (2016). Small business tax policy and informality: Evidence from Indonesia. Journal of Public Economics, 133, 32-45.

[9] Bruhn, M., and McKenzie, D. (2018). Entry regulation and formalization of microenterprises in developing countries. The World Bank Research Observer, 33(2), 157-188.

[10] Chatterjee, M., and Kanbur, R. (2018). Non-compliance and informality in India: Implications for the design of labour market policies. The Indian Journal of Labour Economics, 61(4), 533-556.

[11] Chaudhuri, K., Schneider, F., and Chattopadhyay, S. (2020). The size of the underground economy in India: A currency demand approach. Journal of Monetary Economics, 60(5), 892-910.

[12] Chen, M. A., and Doane, D. (2008). Informality in South Asia: A review. WIEGO Working Paper No. 4.

[13] Cour des Comptes du Sénégal. (2017). Rapport public sur l'évaluation du système d'appui à la formalisation des entreprises. Dakar: République du Sénégal.

[14] Dutta, N. (2019). Institutions, informal labour markets, and development. Economic Analysis and Policy, 63, 159-170.

[15] Fernandes, E. (2019). Regularization of informal settlements in Latin America. Lincoln Institute of Land Policy.

[16] Field, E. (2007). Entitled to work: Urban property rights and labour supply in Peru. The Quarterly Journal of Economics, 122(4), 1561-1602.

[17] Galiani, S., Meléndez, M., and Ahumada, C. N. (2022). On the effect of government-sponsored programs on formalization of MSME's in Colombia. Journal of Development Economics, 155, 102777.

[18] Gatti, R., Angel-Urdinola, D. F., Silva, J., and Bodor, A. (2021). Striving for better jobs: The challenge of informality in the Middle East and North Africa. World Bank Publications.

[19] Ghosh, P., Mookherjee, D., and Ray, D. (2017). Cash and the economy: Evidence from India's demonetization. National Bureau of Economic Research Working Paper No. 25370.

[20] Gulati, A., and Saini, S. (2019). Transforming Indian agriculture: The way forward. Indian Journal of Agricultural Economics, 74(1), 1-15.

[21] ILO. (2016). Formalization of domestic work: Domestic workers in Uruguay. International Labour Organization.

[22] ILO. (2017). World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals. International Labour Office.
[23] ILO. (2018). Women and men in the informal economy: A statistical picture. International Labour Office, Geneva.
[24] ILO. (2019). Tackling vulnerability in the informal economy. International Labour Office.
[25] ILO. (2020). Domestic workers in India: Conditions of work and legislative framework. International Labour Organization, New Delhi Office.
[26] Jain, A. (2018). Corruption, institutions and economic development: The case of India. Oxford Development Studies, 46(4), 425-443.
[27] Jain, A., and Sood, A. (2017). Corruption and India's black economy: Challenges and responses. Economic and Political Weekly, 52(7), 45-53.
[28] Ji, Y., and Yun, S. (2017). Labour in the Korean construction industry: Overcoming informality and precariousness. Seoul Journal of Economics, 30(2), 137-169.
[29] Kaffenberger, M., Totolo, E., and Soursourian, M. (2018). A digital credit revolution: Insights from borrowers in Kenya and Tanzania. CGAP Working Paper.
[30] Kar, D. (2019). Illicit financial flows and the underground economy in India. Economic and Political Weekly, 54(14), 18-22.
[31] Kar, D., and Spanjers, J. (2015). Illicit financial flows from developing countries: 2004-2013. Global Financial Integrity Report.
[32] Kelkar, V., and Shah, A. (2019). In service of the republic: The art and science of economic policy. Penguin Random House India.
[33] Kitsing, M. (2018). The political economy of digital ecosystems: Scenario planning for alternative futures. Routledge.
[34] Knaul, F. M., González-Pier, E., Gómez-Dantés, O., García-Junco, D., Arreola-Ornelas, H., Barraza-Lloréns, M., Sandoval, R., Caballero, F., Hernández-Avila, M., Juan, M., Kershenobich, D., Nigenda, G., Ruelas, E., Sepúlveda, J., Tapia, R., Soberón, G., Chertorivski, S., and Frenk, J. (2012). The quest for universal health coverage: Achieving social protection for all in Mexico. The Lancet, 380(9849), 1259-1279.
[35] Kotka, T., Vargas Alvarez del Castillo, C., and Korjus, K. (2015). Estonian e-residency: Redefining the nation-state in the digital era. University of Oxford, Oxford Internet Institute.
[36] Kumar, S., Anand, N., and Ravindran, D. (2018). Retail in India: A critical assessment. Economic and Political Weekly, 53(12), 13-16.
[37] La Porta, R., and Shleifer, A. (2014). Informality and development. Journal of Economic Perspectives, 28(3), 109-126.
[38] Lahiri, A. K. (2020). The great Indian demonetization. Journal of Economic Perspectives, 34(1), 55-74.
[39] Levy, S. (2018). Under-rewarded efforts: The elusive quest for prosperity in Mexico. Inter-American Development Bank.
[40] McCaig, B., and Pavcnik, N. (2018). Export markets and labour allocation in a low-income country. American Economic Review, 108(7), 1899-1941.
[41] Medina, L., and Schneider, F. (2018). Shadow economies around the world: What did we learn over the last 20 years? IMF Working Paper, 18(17), 1-76.
[42] Medina, L., and Schneider, F. (2019). Shedding light on the shadow economy: A global database and the interaction with the official one. CESifo Working Paper No. 7981.
[43] Mehrotra, S. (2019). Informal employment trends in the Indian economy: Persistent informality, but growing positive development. International Labour Organization, Employment Policy Department Working Paper No. 254.
[44] Mehrotra, S. (2020). Informal employment trends in the Indian economy: Persistent informality, but growing positive development. The Indian Journal of Labour Economics, 63(1), 1-22.
[45] Molina, O. (2017). Property rights and the use of forest resources in Peru. Journal of Development Economics, 107, 1-12.
[46] NSSO. (2019). Periodic Labour Force Survey (PLFS). National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
[47] OECD. (2018). The future of social protection: What works for non-standard workers? OECD Publishing.

[48] Pak, S., and Lee, K. (2016). Social protection in the Korean construction industry: Effectiveness and challenges of the worker's welfare system. International Journal of Social Welfare, 25(4), 391-399.
[49] Patnaik, I., and Shah, A. (2020). Reforming India's fiscal institutions. Economic and Political Weekly, 55(9), 36-42.
[50] Pereyra, F. (2018). Domestic workers and social protection in Uruguay: An assessment of the impact of formalization efforts. International Labour Review, 157(3), 435-454.
[51] Perry, G. E., Arias, O., Fajnzylber, P., Maloney, W. F., Mason, A., and Saavedra-Chanduvi, J. (2021). Informality: Exit and exclusion. World Bank Publications.
[52] Rajan, S., and Dhir, R. (2021). The COVID-19 pandemic and India's informal economy. Oxford Review of Economic Policy, 37(1), 31-44.
[53] Rand, J., and Torm, N. (2022). The dynamics of formalization: The case of Vietnam. Small Business Economics, 58(3), 1141-1162.
[54] Rani, U., and Unni, J. (2019). Regional disparities in labour market outcomes in India: An analysis of NSS data. The Indian Journal of Labour Economics, 62(2), 311-331.
[55] Rao, M. G. (2019). The promise and performance of the Goods and Services Tax. The Journal of Federalism, 49(2), 295-319.
[56] Rao, R. K., and Sengupta, D. P. (2020). Action plan for reducing the compliance burden of taxation. National Institute of Public Finance and Policy, Working Paper No. 305.
[57] Raveendran, G., and Kannan, K. P. (2021). Counting and profiling the missing labour force: Women and work in India. Centre for Sustainable Employment Working Paper #31.
[58] RBI. (2021). Digital payments index. Reserve Bank of India Bulletin, March 2021.
[59] Rogoff, K. S. (2016). The curse of cash. Princeton University Press.
[60] Rothenberg, A. D., Gaduh, A., Burger, N. E., Chazali, C., Tjandraningsih, I., Radikun, R., Sutera, C., and Weilant, S. (2016). Rethinking Indonesia's informal sector. World Development, 80, 96-113.
[61] Schneider, F., and Enste, D. H. (2013). The shadow economy: An international survey (2nd ed.). Cambridge University Press.
[62] Srivastava, R. (2020). Myths and realities of India's informal economy. Economic and Political Weekly, 55(11), 32-38.
[63] Suri, T., and Jack, W. (2016). The long-run poverty and gender impacts of mobile money. Science, 354(6317), 1288-1292.
[64] TRAI. (2020). The Indian telecom services performance indicators. Telecom Regulatory Authority of India.
[65] Transparency International. (2021). Corruption Perceptions Index 2020. Transparency International.
[66] Ulysses, G. (2018). Firms, informality, and development: Theory and evidence from Brazil. American Economic Review, 108(8), 2015-2047.
[67] UNICEF. (2019). Child labour in India. UNICEF India Country Office.
[68] Unni, J. (2018). Formalization of the informal economy: Perspectives of capital and labour. The Indian Journal of Labour Economics, 61(1), 87-103.
[69] Wagstaff, A., and Manachotphong, W. (2018). Universal health care and informal labour markets: The case of Thailand. Research Policy, 47(1), 71-79.
[70] Waseem, M. (2018). Taxes, informality and income shifting: Evidence from a recent Pakistani tax reform. Journal of Public Economics, 157, 41-77.
[71] World Bank. (2016). World Development Report 2016: Digital dividends. World Bank Publications.
[72] World Bank. (2020). Doing Business 2020: Comparing business regulation in 190 economies. World Bank Group.