



# The Role of Subnational Studies in Driving Regulatory Reforms

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The World Bank's Subnational Business Ready (Subnational B-READY) project, the successor to the Subnational Doing Business reports, offers a comprehensive framework for evaluating local business environments. This framework aims to identify regulatory obstacles, promote peer-to-peer learning, and support private sector growth. By adapting the Global B-READY methodology to the specific needs and contexts of individual economies at the subnational level, Subnational B-READY studies enable national and local governments to implement informed and targeted policy reforms that can drive economic development. While the B-READY framework represents a forward-looking approach, this Brief leverages the extensive data and experience from Subnational Doing Business studies, which remain relevant for understanding reform dynamics at the subnational level. By showcasing case studies from four economies (Nigeria, Mexico, Kazakhstan, and South Africa), this Brief shows how subnational studies—built upon the Doing Business legacy—have pinpointed critical challenges and guided data-driven reforms tailored to regional contexts, ultimately enhancing local business climates and fostering economic resilience.

## Promoting reforms at the local level

At the core of subnational studies lies the recognition that local reforms can have a transformative impact on regional business environments, potentially fostering private sector growth through targeted approaches. Subnational studies emphasize decentralization of reforms, empowering regions to develop policies tailored to their unique conditions. Research by Amri and Amri (2021) underscores that decentralized reforms, such as those carried out in Mexico and Nigeria through subnational studies, (as explained later in this Brief), increase regional competitiveness by empowering local governments to act independently of central authorities. In regions where reducing poverty is a key goal, targeted regulatory reforms can contribute to inclusive growth and broader economic participation. Specifically, targeted subnational reforms are likely to generate jobs and reduce poverty levels by enhancing the regulatory environment, addressing localized economic challenges where poverty and unemployment are often concentrated, and fostering private sector growth that can directly improve the livelihoods of those in the most affected regions. Hasan, Mitra, and Ulubasoglu (2006) suggest. Further, easing business entry regulations leads to more competition, business formation, and wage employment, ultimately helping to reduce poverty, Bruhn (2011) finds.

Subnational studies are also grounded in the idea that a streamlined regulatory environment fosters private sector growth, a concept supported by a wealth of scholarly evidence. For instance, there is a strong correlation between streamlined

regulations and increased entrepreneurial activity (Levie and Autio 2011). Greater business entry creates jobs and indicate a healthy, dynamic private sector (Fritsch 2004). Further, increased business entries stimulate competition and innovation, producing positive outcomes such as job creation and poverty alleviation (Baptista, Escária, and Madruga 2007).

By focusing on challenges at the regional level in such areas as business entry, construction permits, and enforcing contracts, subnational studies identify specific regulatory barriers that national-level analyses might overlook, allowing for reforms to be tailored to local conditions.

For instance, the subnational focus of these studies can be instrumental in addressing regional disparities and fostering equitable economic growth. As discussed in this Brief, economies like Mexico and Nigeria leveraged subnational studies to introduce reforms that reduced registration times and streamlined business processes, showcasing the transformative potential of evidence-based policy making. In competitive and innovation-driven economies, removing barriers to business formation not only supports job creation but also attracts investment and promotes market competitiveness—a critical factor for sustained economic growth (Klapper Laeven, and Rajan 2006).

Innovation is another area where targeted subnational reforms can play an essential role. Subnational studies can inspire policies that support entrepreneurship by channeling resources into local strengths and capabilities. Such targeted reforms can leverage

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"Subnational" refers to the level of governance below the national government, such as states, provinces, or municipalities.

**Table 1** Snapshot of Subnational study coverage and indicator scores for seven developing economies (first and last year)

Economy	Cities measured	First year of study	Last year of study	Starting a Business		Dealing with Construction Permits		Enforcing Contracts		Registering Property	
				First year	Last year	First year	Last year	First year	Last year	First year	Last year
Colombia	36	2008	2017	67.35	80.05	—	65.15	—	—	—	64.04
Indonesia	20	2010	2012	69.25	74.17	—	—	—	—	—	—A
Kazakhstan	16	2017	2019	91.25	93.68	71.06	74.74	—	—	83.13	81.17
Kenya	13	2010	2016	61.12	82.65	—	66.27	—	58.14	—	49.39
Mexico	32	2007	2016	76.67	84.80	—	80.41	—	70.80	—	66.01
Nigeria	37	2010	2018	68.86	76.98	75.15	69.19	53.79	55.51	25.35	26.04
South Africa	13	2015	2018	78.50	—	71.41	71.46	55.49	55.59	58.69	57.23

Sources: World Bank, Subnational Doing Business data.

Note: The economies selected have had at least two rounds of subnational studies, “—” indicates data not available for that year.

regional strengths, such as the presence of skilled labor, established industry clusters, and localized technological infrastructure, aligning with the smart specialization framework emphasized by Drivas et al. (2021).

As W. Edwards Deming famously stated, “*In God we trust; all others must bring data.*” Table 1 presents a sample of economies that have had at least two rounds of subnational assessments done over the years for the selected business regulatory areas. The state of the business environment is measured through a series of indicators and summarized by scores. The scores are quantified through averages of the Subnational Doing Business Scores for selected indicators. These averages are calculated by taking the sum of the indicator scores across all assessed regions within an economy and dividing it by the number of regions. In most cases the scores show improvement over time, indicating positive impact of underlying reforms. However, there are also situations where subnational studies reveal worsening business climate conditions, as in the case of Nigeria and South Africa on the topic of dealing with construction permits. Some reforms, especially those targeting legal structures, take time to yield tangible outcomes, resulting in little or no movement in topic scores from year to year until reforms gradually take hold.

Economies that have conducted subnational studies as well as follow-up assessments demonstrate an improvement in the regulatory environment over time, as shown by the general trend displayed in figure 1. For example, in Colombia, the business incorporation score improved from 67.35 in 2008 to 80.05 in 2017. Similarly, the contract enforcement score in Nigeria rose from 53.79 in 2010 to 55.51 in 2018. Yet, the data also reveal negative trends, as in the case of registering property in South Africa, where the score worsened from 58.69 in 2015 to 57.23 in 2018. All these data provide valuable insights for policy makers when assessing the strength of the local business climates and evaluating the impact of implemented reforms.

### Nigeria: Decentralizing reforms and encouraging peer learning for business accessibility

Subnational studies in Nigeria assessed business conditions across Nigerian states, identifying specific regulatory obstacles that limited business entry and operational growth. The latest 2021 study by the Nigerian Investment Promotion Commission (PEBEC 2021) was inspired by a series of earlier World Bank subnational studies conducted between 2010 and 2018, which

laid the groundwork for assessing regulatory environments across all Nigerian states, informing the government’s efforts to improve business environment conditions. The assessments encouraged Nigerian policy makers to pursue decentralization strategies by empowering local Corporate Affairs Commission (CAC) offices to handle business registrations and by expanding Federal Inland Revenue Service (FIRS) offices to offer localized tax services. Inspired by the subnational studies, these changes—including the introduction of electronic platforms for registration and payments—have streamlined bureaucratic processes and minimized delays, making it easier for entrepreneurs to open businesses. This led to both an improvement in the national average time to open a business as well as a significant reduction in disparities in the effectiveness of business regulatory processes among states. Between 2010 and 2018, the average time to register a business decreased by nearly 25 percent (figure 2).

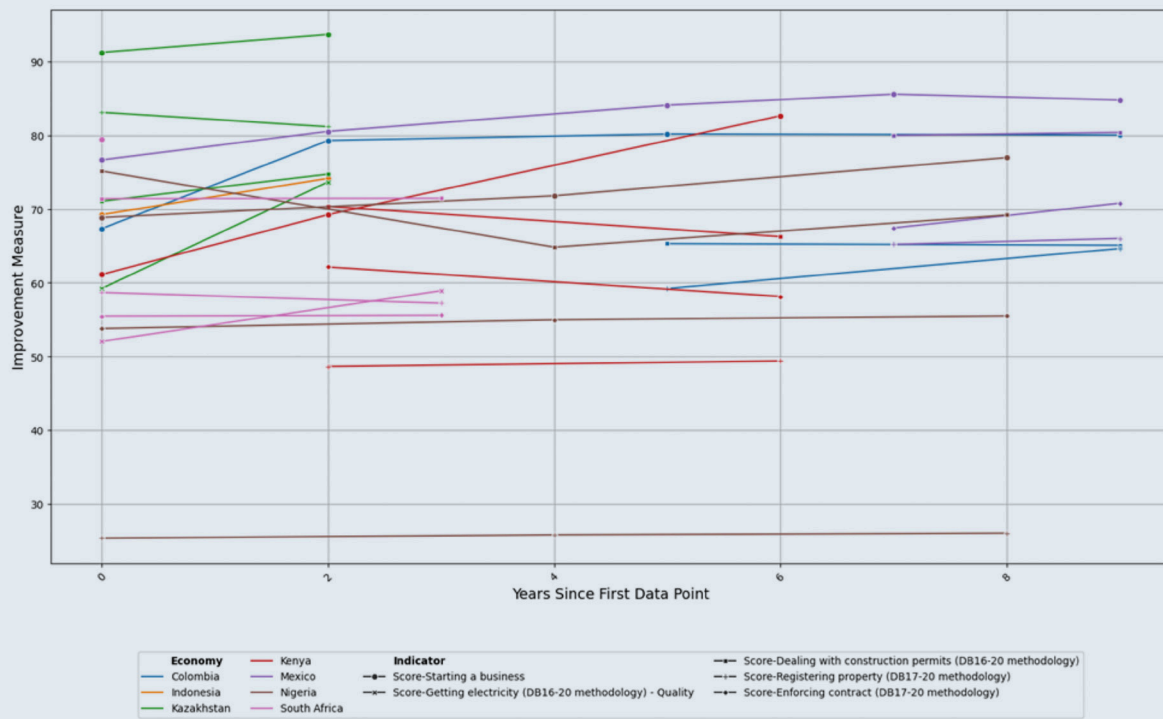
Moreover, lagging regions have benefitted from peer-learning initiatives and targeted reforms, narrowing the regulatory effectiveness gaps with higher-performing states. Federal and state government officials across Nigeria have indicated that they pay close attention to Subnational report results and use them as an instrument of reform—not only to see where states stand with respect to one another but also to identify good practices that can be adopted across cities. Several peer-to-peer learning workshops have taken place at the initiative of the Presidential Enabling Business Environment Secretariat, fostering collaboration and knowledge exchange among states (Doing Business Nigeria 2018/World Bank 2018a). Similar initiatives in other economies highlight the importance of this data-driven approach to reform implementation (see box 1).

### Mexico: Cultivating innovation and competitiveness through subnational regulatory reforms

Mexico’s experience with subnational studies is a compelling example of how regional assessments cultivate a culture of regulatory innovation and competitiveness among regions. Mexico benefitted from three comprehensive subnational studies between 2005 and 2009 (with subsequent follow-up studies conducted in 2012, 2014, and 2016). Importantly, policy makers used the assessments to benchmark and reform business entry regulations across states (APEC and IFC 2009). According to Noemi Carrillo of the Ministry of Economic Development, being part of the Subnational process inspired states to adopt innovative

**Figure 1**

**Regional business environments have been improving in seven selected developing countries that have conducted subnational studies and follow-ups**

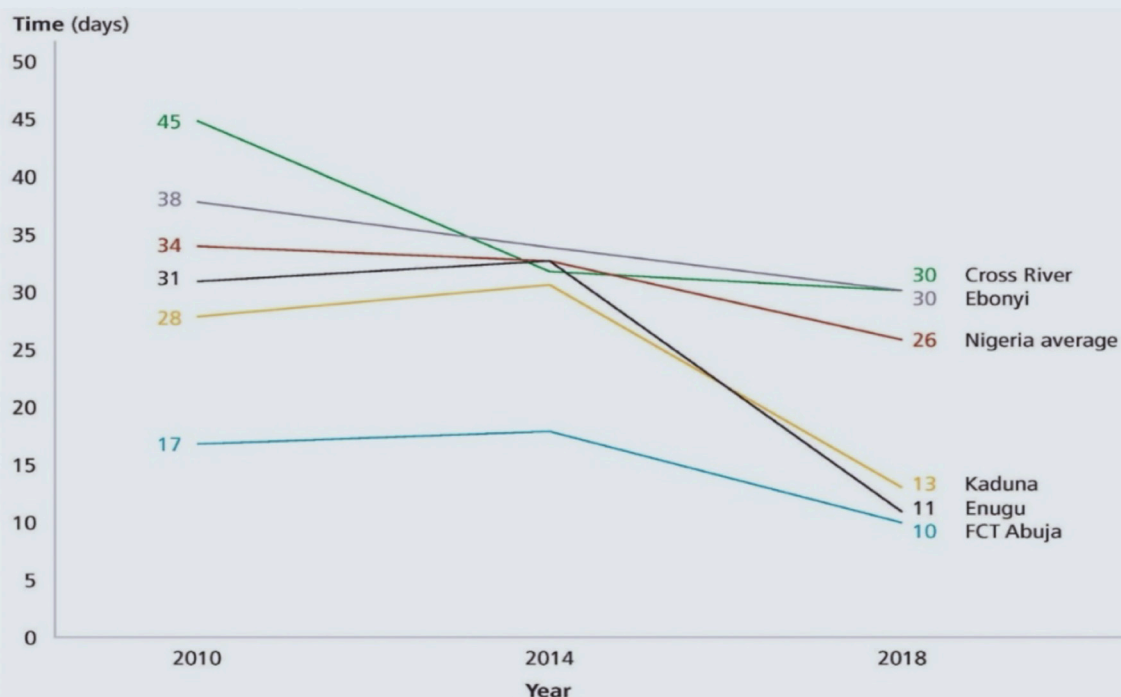


Source: World Bank, Subnational Doing Business data.

Note: The “Improvement Measure” reflects regulatory improvements in specific business-related areas, quantified through averages of the Subnational Doing Business Scores for selected indicators. These averages are calculated by taking the sum of the indicator scores across all assessed regions within an economy and dividing it by the number of regions. This approach standardizes the measure, allowing for a consistent comparison of regulatory changes over time and across economies. For research purposes, it highlights trends in the business environment and evaluates the extent of regulatory enhancements.

**Figure 2**

**Nigeria: The average time to register a business dropped by almost one quarter between 2010 and 2018**

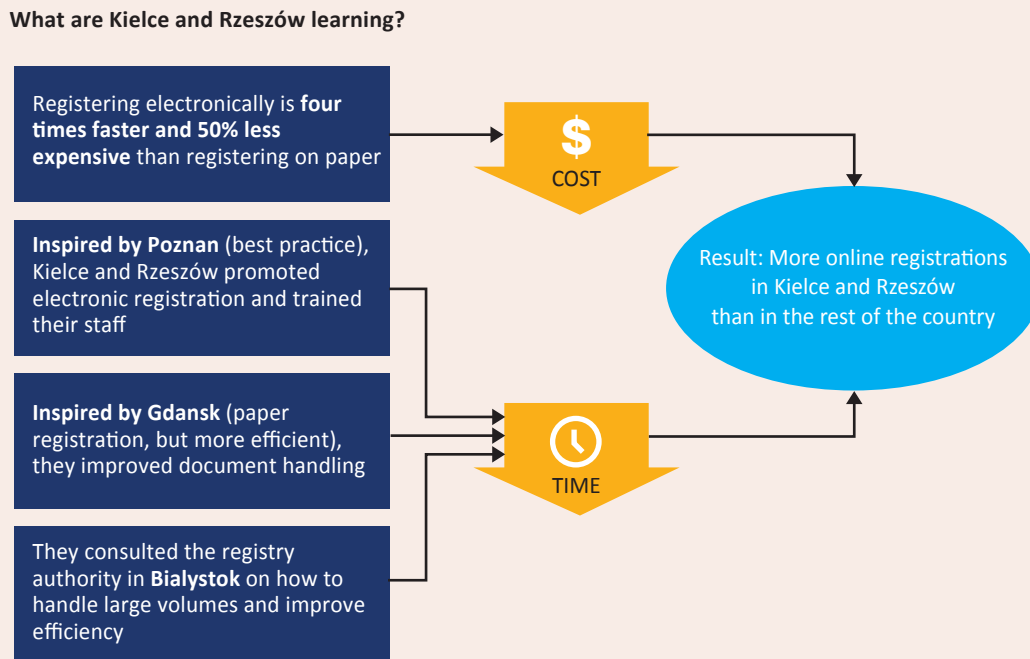


Source: World Bank, Subnational Doing Business data.

## Box 1 In Poland, what did the lowest-performing regions do to improve?

The Polish national government designed an action plan—based on the results of the Subnational Doing Business assessment—to help the two lowest-performing regions (Kielce and Rzeszów) adopt best practices in business registration from higher-performing regions (figure B1.1). As a result, lagging regions achieved notable improvements, contributing to an overall increase in the country's regulatory efficiency. Such exchanges of information and peer learning opportunities are key to fostering reform and ensuring the sustainability of regulatory improvements.

Figure B1.1. How lower-performing regions in Poland adopted best practices in business registration



Source: World Bank, Doing Business database; Drozd, Sacha, and Kałużny 2017.

practices, cultivating a reform-oriented mindset (APEC and IFC 2009). Additionally, officials from the Ministry of Economic Development of Puebla stated that the first Subnational study in Mexico and the state's low performance were critical drivers for subsequent reforms (APEC and IFC 2009).

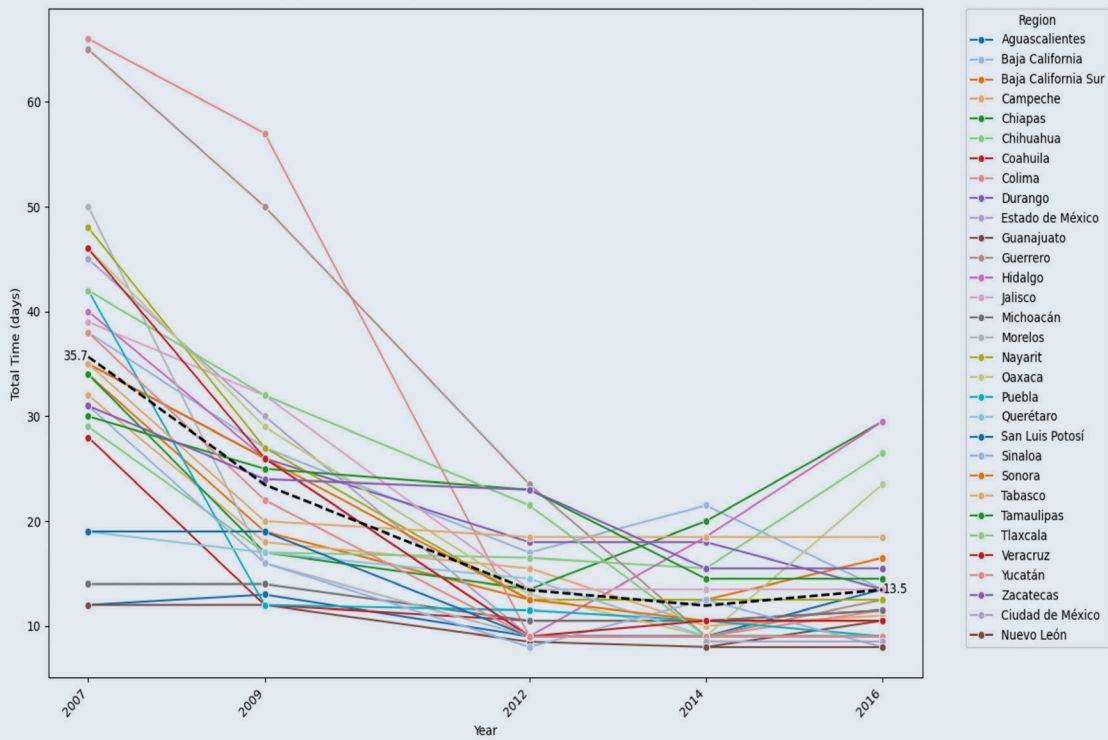
Multiple examples in Mexico illustrate how Subnational studies exert pressure on local governments to enhance the business environment (APEC and IFC 2009). Notably, these studies have resulted in considerable improvements in both average performance and in helping lagging regions catch up with higher-performing states. Figure 3 demonstrates substantial changes that resulted from regulatory improvements across regions. On average, business entry time across Mexico fell by 62.18 percent. For example, Coahuila state streamlined licensing and reduced permits, cutting the time to register a business from 28 to 12 days. In Querétaro state, authorities simplified tax registration and reduced required documents, lowering the time to incorporate a business from 19 to 9 days. Similarly, Puebla's government reduced the time to start a company from 42 to 9 days by streamlining procedures to obtain municipal licenses, training employees, establishing one-stop-shops (*kioscos de información*), and introducing electronic systems at the Public Registry of Commerce. Mexico's Subnational reforms demonstrate how targeted regulatory changes have simplified business processes and improved conditions for market participants.

Furthermore, subnational studies have promoted inclusive and collaborative approaches to policy making in the country. The state of Querétaro formed working groups with universities, municipal and federal governments, chambers of commerce, business leaders, and notary associations to evaluate subnational indicators and develop reform roadmaps. Public officials recognized that the subnational framework was instrumental in facilitating this multistakeholder approach, which resulted in comprehensive and practical reforms (APEC and IFC 2009). This collaborative effort was later adopted at the federal level, creating a formal mechanism for stakeholder engagement in future reforms (APEC and IFC 2009).

### Kazakhstan: Driving productivity gains with regional collaboration and reforms

Kazakhstan's experience with Subnational studies illustrates the importance of reforms to enhance business productivity. Following the publication of the Subnational study in Kazakhstan in 2017, the Ministry of Energy organized a peer-to-peer learning workshop in Kazakhstan's largest city, Almaty. This workshop brought together officials from major public and private power distribution utilities and suppliers to discuss the efficient implementation of reforms introduced by the Ministry. It provided a platform for sharing best practices, with Almaty city government demonstrating its new online system for applying for technical conditions required for obtaining an electricity

**Figure 3** In Mexico, the time to incorporate a business fell by more than 60 percent, on average



Source: World Bank, Subnational Doing Business data.

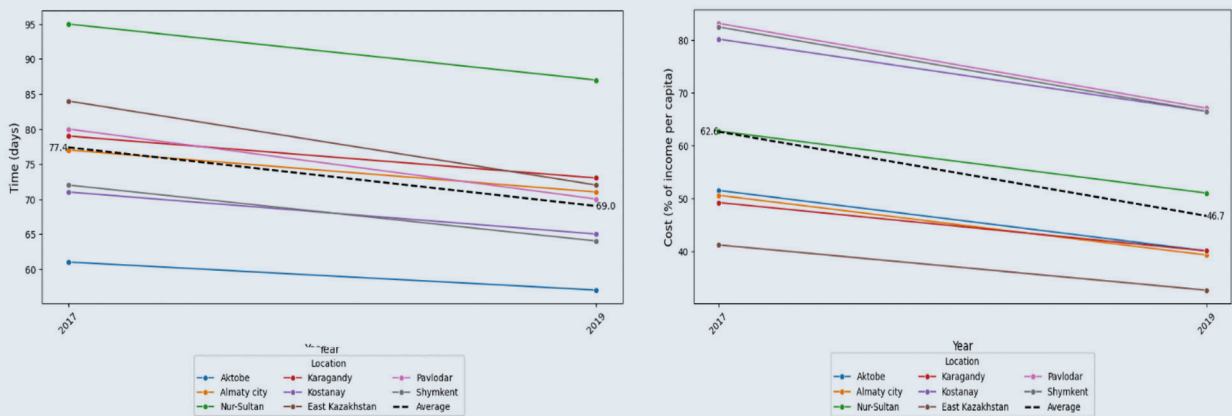
connection, as well as the streamlined approval process. These peer-learning sessions enabled lower-performing regions to replicate Almaty’s successful reforms, reducing the gap in service efficiency. As a result, national and regional-level reforms in Kazakhstan significantly reduced both the time and costs associated with electricity connections (figure 4).

Between 2017 and 2019, the average time to obtain electricity decreased by 8 days while the cost, measured as a percentage of income per capita, fell from 62.6 percent to 46.7 percent—a

reduction of 15.9 percentage points. Additionally, lagging regions demonstrated marked improvements in reducing times and costs of business procedures, catching up with more efficient regions, such as Almaty. These changes reflect improvements in service efficiency, directly benefiting local businesses (Doing Business in Kazakhstan 2019/World Bank 2019).

Including all stakeholders in the policy-making process, as was practiced in Kazakhstan, ensures that the resulting reforms are practical, sustainable, and closely aligned with the needs of the

**Figure 4** In Kazakhstan, the time and cost to obtain an electricity connection fell in all regions



Source: World Bank, Subnational Doing Business data.

private sector. Generally, this inclusive approach to the design and implementation of reforms promotes a more efficient, productive, and dynamic economic environment, enabling businesses to thrive and contribute more effectively to overall economic growth (OECD 2009). Kazakhstan’s experience exemplifies how subnational studies enable peer-to-peer learning for planning regional reforms, hence promoting regulatory efficiency, facilitating convergence, and contributing to the overall regulatory and economic resilience.

### South Africa: Leveraging data-driven insights for local-level efficiency and growth

South Africa’s subnational studies present yet another example of the use of regional, actionable data to address regulatory inefficiencies at the local level. The Cities Support Programme (CSP) used the initial World Bank subnational study in South Africa 2015 (SNSA 2015) to advance conversations around regulatory reform, aiming to increase business opportunities, reduce poverty, and drive economic progress through good governance and tailored subnational policy (National Treasury, Republic of South Africa). This initial Subnational report by the World Bank offered insights that helped municipalities design action plans for reforms related to construction permits, electricity connections, and property registration (Doing Business in South Africa 2018/World Bank 2018b).

Publication of the SNSA 2015 report propelled implementation of multifaceted reforms to improve business environment on the municipal level. By the time of the subsequent World Bank 2018 Subnational study in South Africa (SNSA 2018), the metropolitan municipality of Mangaung had cut the time required to obtain an occupancy certification by 17 percent

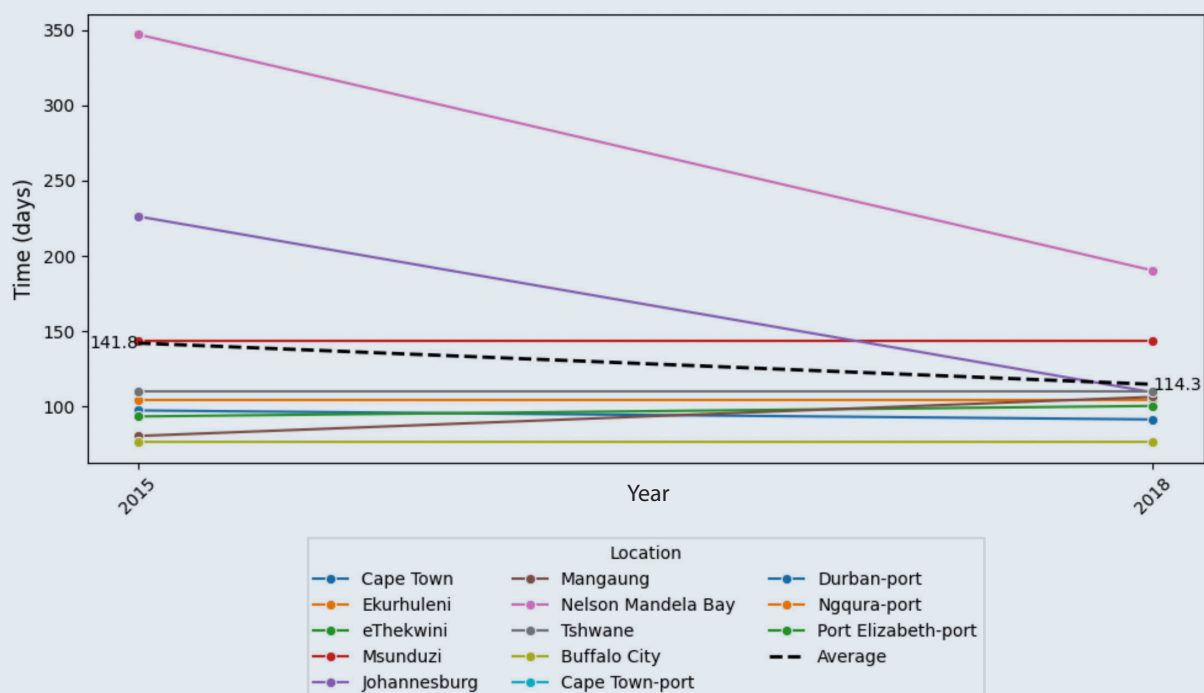
percent (4 days), while Tshwane metropolitan municipality had reduced it by 30 percent (2 days). Furthermore, the metropolitan municipality of Nelson Mandela Bay achieved notable progress by decreasing the time for preconstruction approval of site development plans by more than 12 percent (5 days) and reducing the time for property-related certifications by more than threefold—from 42 to 12 days. Additionally, Nelson Mandela Bay’s efforts to improve efficiency in obtaining electricity connections reduced the time by more than five months (figure 5). These reforms collectively improved the national average efficiency, while also narrowing differences between higher and lower-performing municipalities.

The National Treasury of South Africa acknowledged that Subnational studies were instrumental in identifying these regulatory bottlenecks, which facilitated targeted reforms to simplify administrative procedures (Doing Business in South Africa 2018/World Bank 2018b). The impact of these studies has continued, as South Africa, through the CSP, has continued to monitor local-level regulatory reforms to sustain improvements over time.

In addition to regulatory reforms, the CSP has supported productivity gains by enhancing the reliability of infrastructure. In collaboration with the World Bank’s Urban Technical Assistance Program, the Programme implemented initiatives to monitor electricity supply reliability in key cities like Cape Town, Johannesburg, and eThekweni. By adopting internationally recognized methodologies, such as the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI), these cities improved the reliability of electricity supply and the transparency of tariffs (Doing Business in South Africa 2018/World Bank 2018b).

Figure 5

In South Africa, the time to obtain an electricity connection decreased substantially in certain locations



Source: World Bank, Subnational Doing Business data.

Furthermore, enabled by subnational studies data, the CSP has leveraged peer-learning initiatives to strengthen the effectiveness of the implemented reforms by encouraging municipalities to share knowledge and learn from one another's successes. For example, the CSP organizes peer-learning events where municipalities can share successful strategies and discuss proven solutions to improve local business climates (Doing Business in South Africa 2018/World Bank 2018b). This collaborative approach, facilitated by subnational studies, has proven effective not only in South Africa but also in economies such as Kenya, Nigeria, and Kazakhstan, where peer-learning initiatives have supported regulatory improvements (Doing Business in Kenya 2016/World Bank 2016; Doing Business in Nigeria 2018/World Bank 2018a; Doing Business in Kazakhstan 2019/World Bank 2019). South Africa's case demonstrates the dual benefits of subnational studies: driving average improvements in efficiency while fostering convergence through peer learning and collaborative reforms.

## Conclusion

Subnational studies have played a crucial role in identifying regulatory bottlenecks and driving reforms to improve the regional business climates. By providing factual data coupled with actionable recommendations, subnational studies have helped regions streamline administrative processes and simplify regulations, hence creating more business-friendly conditions. Examples from Mexico, Nigeria, Kazakhstan, and South Africa demonstrate how subnational studies have catalyzed reforms that have led to positive change, showcasing their value as a tool for enabling targeted, evidence-based policy making. The studies embody the principle that empowering regions to address their

unique challenges and design tailored reforms can contribute to fostering economic resilience.

Subnational studies have provided governments with effective tools for reform. In Nigeria and South Africa, the studies supported creation of task forces and peer-learning platforms, encouraging regional collaboration and driving improvements in business processes. In Mexico, subnational studies enabled multistakeholder engagement, resulting in improved regulatory efficiency. Kazakhstan's experience further underscores the importance of engaging different stakeholders, especially from the private sector, to ensure reforms are practical, relevant, and sustainable.

Moreover, recent subnational B-READY studies conducted across six EU countries (Bulgaria, Croatia, Hungary, Portugal, Romania, and the Slovak Republic) provide compelling evidence of the importance of subnational assessments in uncovering disparities, particularly in operational efficiency. The report data reveal significant variation across locations in the time and cost associated with insolvency processes, obtaining utility services, processing permits, and resolving disputes. As evidenced by Saltane's work (2024), each city has room for improvement. Addressing these gaps through localized reforms and evidence-based dialogues can enhance the business climate, reinforcing the importance of regionally tailored interventions.

This Brief highlights that empowering regions through targeted, data-driven reforms can not only improve regulatory environments but also foster economic resilience and support sustainable development. By addressing regional disparities and tailoring interventions to local needs, such reforms can enhance the overall business climate and contribute to long-term growth.

## References

- Amri, P., and M. Amri. 2021. "What Influences Subnational Competitiveness in a Decentralized Indonesia?" *Journal of Southeast Asian Economies* 38 (3): 336–57.
- APEC and IFC (Asian Pacific Economic Cooperation and International Finance Corporation). 2009. "Mexico Case Study: Compare, Compete, Cooperate: How Sub-National Doing Business Helps Mexican States to Improve Commercial Regulations." In *Sub-national Doing Business—Driving Reform of Local and Regional Business Environments in APEC*, 17–34. APEC Secretariat for APEC and IFC.
- Baptista, R., V. Escária, and P. Madruga. 2007. "Entrepreneurship, Regional Development and Job Creation: The Case of Portugal." *Small Business Economics* 30 (1): 49–58.
- Bruhn, M. 2011. "License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico." *Review of Economics and Statistics* 93 (1): 382–86.
- Drivas, K., C. Economidou, I. Kaplanis, and M. T. Tagaraki. 2021. "Smart Specialization in a Subnational Context: Evidence from Greece." *SPOUDAI Journal of Economics and Business* 71 (3–4): 3–12.
- Drozd, M. A., W. T. Sacha, and T. Kałużny. 2017. "Poland Catching-Up Regions: Recommendations for Easier Business Registration." World Bank, Washington, DC.
- Fritsch, M. 2004. "Entrepreneurship, Entry and Performance of New Business Compared in Two Growth Regimes: East and West Germany." *Journal of Evolutionary Economics* 14 (5): 525–42.
- Hasan, R., D. Mitra, D., and M. Ulubasoglu. 2007. "Institutions and Policies for Growth and Poverty Reduction: The Role of Private Sector Development." *Asian Development Review* 24 (01): 69–116.
- Klapper, L., L. Laeven, and R. Rajan. 2006. "Entry Regulation as a Barrier to Entrepreneurship." *Journal of Financial Economics* 82 (3): 591–629.
- Levie, J., and E. Autio. 2011. "Regulatory Burden, Rule of Law, and Entry of Strategic Entrepreneurs: An International Panel Study." *Journal of Management Studies* 48 (6): 1392–1419.
- Nigeria, Enabling Business Environment Secretariat. 2021. "Ease of Doing Business Subnational Baseline Survey." Nigeria Investment Promotion Commission (NIPC), Nigeria.
- OECD (Organisation for Economic Co-operation and Development). 2009. "Public Engagement Is a Must in a Multi-Stakeholder World." In *Focus on Citizens, Public Engagement for Better Policy and Services*, 207–13. Paris: OECD Publishing.
- Saltane, V. 2024. "Uneven local business climates: Six EU countries show gaps in public service delivery and operational efficiency" World Bank Blogs: Let's Talk Development.
- South Africa, National Treasury–Republic of South Africa. No date. "About the CSP." <https://csp.treasury.gov.za/>.
- World Bank. 2009. *Doing Business in Mexico 2009*. Washington, DC: World Bank.
- World Bank. 2015. *Doing Business in South Africa 2015*. Washington, DC: World Bank.
- World Bank. 2016. *Doing Business in Kenya 2016*. Washington, DC: World Bank.
- World Bank. 2018a. *Doing Business in the Nigeria 2018*. Washington, DC: World Bank.
- World Bank. 2018b. *Doing Business in South Africa 2018*. Washington, DC: World Bank.
- World Bank. 2019. *Doing Business in Kazakhstan 2019*. Washington, DC: World Bank.