



MUHAMMAD USMAN

Spatial Structure of Commerce in Pakistan in Terms of Establishment and Formalization

Abstract: Wholesale and retail trade is the largest block of Pakistan's enumerated economic establishments. Using the district release of the 2023/24 Economic Census, joined to 2023 population totals, this note maps the stock of trading premises and retail shops across 135 districts in the four provinces. It then sets that stock beside the SECP company register, as a measure of formal entry, and beside satellite night-time lights, as a measure of subsequent activity growth. The three layers support a simple district typology and a reading of formalisation as a thin overlay on a vast micro-enterprise base.

Keywords: Pakistan; Economic Census; wholesale and retail trade; retail density; informal enterprise; company registration; night-time lights; spatial structure

1. Introduction

Wholesale and retail trade is involved in everyday economic life in Pakistan. The first integrated Economic Census, conducted by the Pakistan Bureau of Statistics alongside the Seventh Population and Housing Census, places more than seven million economic establishments on a common national frame [1, 2]. Trade accounts for the largest block of these units, and retail shops alone run into the millions [4, 8]. For all the weight of this sector in employment and household provisioning, published work has long described commerce in national aggregates. District patterns of shop density, the thin corporate layer sitting above the informal bazaar, and the geography of subsequent activity growth have remained difficult to set beside one another. This note brings those three layers into a single, compact account.

1.1 Motivation

Commerce in Pakistan is at once ubiquitous and poorly mapped. Kiryana stores, wholesale yards, repair workshops and small trading premises absorb a large share of urban and small-town livelihoods. National accounts record the contribution of wholesale and retail trade to value added; labour-force rounds record the share of workers in the same activities [7]. A district-level picture of the establishments has been poor. Policy discussion of SMEs, municipal markets, secondary-city development and the tax net all presuppose some sense of where trading units cluster and how dense those clusters are relative to population.

The 2023/24 Economic Census assisted in this area because it unified information [1]. Gallup Pakistan's reading of the same files puts the national total at about 7.14 million establishments, with wholesale and retail trade (PSIC 45 to 47) above three million units and retail shops near 2.7 million [8, 10]. Punjab holds around three-fifths of the country's establishments, a share that exceeds its population weight [11]. Almost the entire frame is micro in scale: units with fewer than fifty persons engaged dominate the count [9]. These magnitudes concretize the spatial question; a district with a thick carpet of small shops is a different commercial landscape from a district whose population is large and whose trading premises are few. Secondary

cities—Gujranwala, Multan, Faisalabad, Peshawar, Quetta, and a long tail of district headquarters—are positioned between the metropolitan cores and the sparse periphery, and they are precisely the places where debates about market development now turn.

The Securities and Exchange Commission of Pakistan reports a corporate register still measured in the low hundreds of thousands, even after several years of rapid online incorporation [12]. Trading remains a prominent sector among new companies, and recent Commission releases point to registrations arising from a wide set of smaller cities and towns [13–15]. The contrast between millions of census establishments and a far smaller company register is itself a fact about how commerce is organised in the country. Pairing the two official sources, at provincial resolution, gives a first measure of that gap.

1.2 Scope of the available data

The paper works with three public layers, each answering a distinct question.

The Economic Census 2023/24 is the core [1, 2, 4]. Provincial Excel files already released by PBS report, for every district, the number of establishments and the persons engaged, first by major PSIC sector and then by unit type. From these files one may construct a district panel of all establishments, of wholesale and retail trade, and—where the unit-type table is in hand—of retail shops. Population totals from the 2023 Census convert those counts into densities [6]. The resulting picture is a stock at one point in time: a map of how thickly trading premises are spread across the districts of the country.

Change in the number of physical shops, year by year and town by town, is unavailable outside this frame. Pakistan’s earlier attempt at an economic census left an incomplete national list, so a district panel of openings and closures is still to be built from future rounds or from an open Statistical Business Register. In place of that missing flow, the paper draws on two corroborating series that are public, regular, and geographically at least provincial or district in reach.

The first is the SECP series of company incorporations [12–15]. Monthly and annual releases give new registrations by province and by broad sector, including trading, services, and information technology and e-commerce. The series captures formal entry and the widening of the corporate map toward

smaller cities. It remains a register of companies rather than of storefronts; the two objects differ in legal form, in scale, and in coverage of the informal bazaar.

The second is satellite night-time lights, drawn from VIIRS composites and already used in Pakistani work on district and provincial economic activity [19–22, 25]. Lights track the intensity of non-farm activity across years and can be ranked at district or tehsil level. Districts that shine more brightly over time are places where commercial and urban activity has thickened. Lights are treated here as a growth ranking that sits beside the 2023 stock, rather than as a count of new shutters.

A short national anchor comes from the Pakistan Institute of Development Economics’ reconstruction of wholesale and retail trade, which places the sector on a long historical path of establishment growth and still faster growth in output [16]. That national path explains how the 2023 stock came to be as large as it is.

1.3 Contribution

The paper offers a first compact district account of trade and retail density using the official Economic Census files, joined to 2023 population totals [2, 4, 6]. That district reading sits in a wider literature on how retail outlets are distributed across cities and regions [26]. It then sets the census stock beside two accessible official and quasi-official series: SECP incorporations as a measure of formal entry [12], and night-time lights as a measure of subsequent activity growth [19–21]. The three layers together support a simple typology of districts—commercial cores, mixed industrial-commercial districts, populous but shop-thin districts, and a sparse periphery—and a reading of formalisation as a thin overlay on a vast micro-enterprise base.

The note is written for replication. Parsing steps for the stacked PBS tables, the density formulae, and the concordance of district names belong in an appendix, so that later work may extend the same frame once a second census round or a geo-coded business register becomes available. Causal claims about roads, industrial estates, remittances or mall development are left for papers with a different design. The present purpose is more modest and,

given the novelty of the census frame, prior: to put the geography of Pakistani commerce on the table in a form that other researchers can use.

2. Data and measurement

2.1 Primary data examination

The working frame is the district release of Pakistan's first integrated Economic Census, carried out by the Pakistan Bureau of Statistics with the Seventh Population and Housing Census [1, 6]. Enumerators recorded every economic unit encountered on the building frame and coded it to the Pakistan Standard Industrial Classification. The public district workbooks, posted province by province, are the files used here [2, 4]. Two tables from that release do the main work. Table 1 gives, for each district, the number of establishments and the persons engaged by major PSIC sector. Table 2 gives the same two quantities by unit type—retail shop, wholesale shop, service shop, production shop, hotel, factory, bank, school, and the remaining categories on the PBS list.

The workbooks use a stacking mechanism of managing district blocks, which leads to some risks in terms of accuracy, as opposed to a matrix list. A district name sits on its own row; a header follows; a district total follows; sector or unit-type rows follow after that. The files carry the usual marks of a first public release. District names vary in spelling across tables (Jhang appears as JHUNG in one sheet; Swat as SAWAT; Nowshera as NWSHEHRA). Footnotes in the unit-type sheets occupy the same column as district titles. The compilation treats those footnotes as notes and keeps a single cleaned district identifier. Once parsed, Table 1 yields 135 districts across the four provinces: 36 in Punjab, 30 in Sindh, 35 in Khyber Pakhtunkhwa and 34 in Balochistan. Islamabad Capital Territory is covered in the published national and provincial summaries and is brought in at that level; a district workbook in the same layout is still to be posted.

From the parsed blocks three stock measures are retained for every district. The first is the district total of establishments and of persons engaged. The second is wholesale and retail trade together with its workforce. The third, drawn from Table 2, is the count of retail shops and of wholesale shops. Two

supporting cuts travel with these: manufacturing (PSIC 10 to 33) and other service activities (PSIC 94 to 96), so that trade can be read against the rest of the local enterprise mix. Persons engaged per trading establishment give a crude measure of scale. District population from the 2023 Census converts the counts into densities—establishments per thousand residents—which are the quantities used in Section 3 [6].

The compiled four-province frame sits close to the published national totals. The remaining gap is accounted for, in the main, by Islamabad Capital Territory, whose establishment count in the Gallup Pakistan reading of the same census is of the order of 87,000 units [8, 11]. Table 1 sets out the files and the fields taken from them. Table 2 reports the compiled stock against the published national benchmarks. Table 3 reports the shop and related unit-type counts on which the retail analysis rests.

Table 1: Source files and fields drawn from the Economic Census district release

Source	What is taken
Table 1. Establishments and workforce by PSIC (major categories). Four provincial workbooks [2]. Grain: district × sector.	District name; sector; PSIC; establishments; persons engaged. Constructs: all establishments; PSIC 45–47; PSIC 10–33; PSIC 94–96; persons per trade unit.
Table 2. Establishments and workforce by unit type. Same provinces [4]. Grain: district × unit type.	Retail / wholesale / service / production shops; hotel; factory. Constructs: retail-shop and wholesale-shop counts; retail share.
Seventh Population and Housing Census, 2023 [6]. Grain: district.	Total population; urban share where published. Constructs: trade units and retail shops per 1,000 residents.

Workbooks from the PBS Economic Census pages. District identifiers standardised by hand where spellings diverged. Footnote rows in the unit-type files were set aside.

Table 2: Compiled four-province frame and published national benchmarks, Economic Census 2023/24

	Districts	Establishments	Persons engaged	Trade units (PSIC 45–47)	Persons in trade
Punjab	36	4,364,293	13,645,277	1,882,159	4,134,073
Sindh	30	1,385,170	5,713,319	695,488	1,905,010
Khyber Pakhtunkhwa	35	1,004,235	3,981,466	456,231	916,802
Balochistan	34	303,089	1,382,545	151,427	338,232
Four-province compilation	135	7,056,787	24,722,607	3,185,305	7,294,117
Published national total (PBS / Gallup)	—	7.14 million	25.34 million	3.22 million	7.44 million

Compiled figures are the sum of district blocks in the provincial Table 1 workbooks [2]. Published national totals include Islamabad Capital Territory and any residual units outside the four workbooks [3, 8, 10]. Punjab's 4.36 million establishments are 61.8 per cent of the four-province frame and about 61 per cent of the published national stock. Trade is 45.1 per cent of compiled establishments in Punjab, 50.2 per cent in Sindh, 45.4 per cent in Khyber Pakhtunkhwa and 50.0 per cent in Balochistan.

Table 3: Shop and related unit types in the compiled files

Unit type (PBS label)	Punjab	Sindh	KP	Balochistan	Four-province total
Shop Retail	1,609,106	605,306	403,600	130,601	2,748,613
Shop Wholesale	109,652	44,594	21,773	9,993	186,012
Shop Service	526,913	166,141	85,195	28,472	806,721
Shop Production	415,676	120,880	81,762	16,959	635,277
Hotel	152,984	55,632	31,387	11,555	251,558
Factory	14,544	5,525	2,101	645	22,815
All establishments (district totals)	4,364,293	1,385,170	1,004,235	303,089	7,056,787

Labels follow the unit-type sheets [4]. The four-province retail-shop total of 2.75 million matches the published national figure of nearly 2.7 million retail shops once Islamabad and rounding in the public briefs are allowed for [5, 8]. Factories remain a thin layer: 22,815 units in the compiled frame, against more than two and a half million retail shops. The trade workforce of 7.29 million across 3.19 million trade establishments implies about 2.3 persons engaged per trading unit in the four-province frame.

Two features of this source shape everything that follows. The census is a stock taken in 2023/24, so densities in Section 3 describe the geography of premises as enumerated, rather than a history of openings. And the public district files already support the paper's main descriptive task: they name every district, they separate trade from other sectors, and they separate retail shops from the rest of the unit-type list. That is the foundation on which the SECP and night-light layers in the remainder of Section 2 are added.

2.2 Linking the census stock to corroborating series

Where the previous subsection records how many trading units stood in each district in 2023/24, two further public series supply movement and legal

form. The first is the Securities and Exchange Commission of Pakistan's incorporation record [12]. The second is satellite night-time lights [19, 20]. Both join the census frame on geography that is already in the compiled files, and both are issued on a timetable that the census, as a single enumeration, does not provide.

Company incorporations join at province and, in the Commission's recent releases, at sector. Annual reports and monthly press notes give the number of new companies by Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, Islamabad Capital Territory and Gilgit-Baltistan, with trading listed among the leading sectors beside information technology and e-commerce, services, and construction [12, 14, 15]. The stock of registered companies reached 222,697 at the close of 2023–24 after 27,542 new registrations in that year [12]; later releases put the register above 258,000 by the end of 2024–25 and at 294,101 by April 2026 [13, 15]. In the first four months of 2025–26 the Commission recorded 14,802 new companies, of which 7,476 were in Punjab, 3,230 in Islamabad Capital Territory, 2,197 in Sindh, 1,320 in Khyber Pakhtunkhwa, 337 in Gilgit-Baltistan and 242 in Balochistan [14]. Trading accounted for 1,954 of those registrations. About three in ten of the new companies in that period came from some 250 cities and towns outside Lahore, Karachi and Islamabad, including district headquarters such as Layyah, Burewala, Swat, Gwadar and Gilgit [14].

These figures match the census in direction even though they measure a different object. Punjab leads both the establishment stock and the flow of new companies. Trading is a large sector in both sources. The scale, however, differs by an order of magnitude: 3.19 million trade establishments in the four-province census frame against a national company register still below 0.3 million [2, 15]. The formalization ratio is the official, reproducible measure of how much of the enumerated bazaar has taken corporate form. Sector tags on new companies (trading, e-commerce, services) further show which parts of commerce are entering the corporate register, which the census unit-type list, being a stock of premises, leaves implicit.

Night-time lights join at district and, in processed compilations such as Data Darbar, at tehsil [19, 25]. VIIRS composites give a radiance value

for each month and year from the early 2010s onward [19]. Pakistani applications of the same family of data have already allocated provincial GDP and estimated district growth, including work on provincial and district rates [20], the Khyber Pakhtunkhwa Bureau of Statistics night-light GDP study [21], and district GDP estimates for Azad Jammu and Kashmir [22]. Validation work on Karachi shows that radiance tracks population density and economic activity more reliably than intra-urban living standards [23]; harmonized DMSP–VIIRS series have been shown to predict subnational development indicators in other low-income settings [24].

The merge with the census is a name concordance on district titles, after the spelling variants already cleaned above. Once merged, two comparisons become available. The level comparison asks whether districts with a high 2023 trade density are also bright in the lights record. The change comparison ranks districts by growth in radiance over a common window (2012–2024, or the shorter 2020–2026 series) and sets that ranking beside the 2023 stock. Agreement on the level—commercial cores that are both shop-dense and luminous—strengthens the reading of the census map. Divergence on the change—shop-dense districts whose lights are flat, or thinner districts whose lights are rising—is equally useful, because it separates a large inherited stock of premises from recent thickening of activity.

A short national series from the Pakistan Institute of Development Economics supplies the historical scale against which both proxies are read [16]. That reconstruction puts wholesale and retail trade at about 2.66 million establishments and an average annual increase of 4.14 per cent since 1988, with output rising faster, at 6.50 per cent. The 2023 census stock is then the current end of a long national expansion rather than a one-year event. Population totals from the 2023 Census, already used as the density denominator, also join the lights series so that radiance can be expressed per resident where the raw night-time signal would otherwise favour large, densely built districts [6]. Labour Force Survey rounds, which record employment in trade at provincial level, offer a further consistency check on the workforce column of the census, though their district detail is thinner than the census frame and is used only in passing [7].

2.3 Limits of the compiled frame

The Economic Census records premises and persons engaged at the date of enumeration. A district history of openings and closures would require a second comparable census, an open Statistical Business Register with dates of birth and death, or a licensed point-of-interest panel with two vintages. Until those appear, growth in Section 5 is inferred from lights and from the corporate flow, with the PIDE national path as background [12, 16, 19].

SECP incorporations are companies. Most census establishments are unincorporated micro units. An increase in registrations may reflect easier online filing through eZfile as much as a new physical outlet [12], and the Commission's town list, while valuable, is still released as illustration rather than as a full microdata file of registered offices. Formalisation ratios in Section 4 are therefore provincial and indicative.

Night-time lights measure radiance. Gas flaring, snow and desert albedo, and the concentration of public lighting in cantonments and highways all affect the signal, which is why low-population tehsils need a flag and why agricultural output is better allocated by rural population than by luminosity [21, 23, 25]. Lights corroborate the census map; they do not count shutters.

Two further boundaries follow from the source files themselves. Household-based economic activity—tailoring, livestock, food preparation and the like—was enumerated on a separate, much larger count in the census documentation, and that count is left outside the establishment densities used here. Islamabad Capital Territory, Gilgit-Baltistan and Azad Jammu and Kashmir enter the provincial and national comparisons from published summaries, while the tidy district matrix of Tables 2 and 3 is the four-province workbook release. The unit of analysis throughout is the district. Towns appear in the narrative as headquarters and as the SECP list of secondary centres; they are within districts rather than a parallel official frame.

3. The stock of commerce across districts

With the district frame in hand, the 2023/24 stock can be read at three resolutions: the province, the district count of trading units, and the mix of sectors inside those districts. Population totals from the Seventh Census convert

the counts into densities [6]. Unless a district figure is discussed on its own, provincial densities below use the official 2023 provincial populations, so that Islamabad's omission from the workbooks does not distort the four-province comparison.

3.1 National and provincial totals

Of the 7.06 million establishments compiled from the four provincial Table 1 files, 3.19 million—45.1 per cent—are in wholesale and retail trade, including repair of motor vehicles and motorcycles (PSIC 45–47) [2]. Those trading units engage 7.29 million persons, or about 2.3 persons per establishment. Retail shops, from the unit-type files, are 2.75 million of the same frame [4]. Trade is therefore the modal activity in every province, yet the weight of that mode and the density of premises both vary.

Punjab holds 4.36 million establishments and 1.88 million trade units, 61.8 and 59.1 per cent of the four-province totals. Relative to its 2023 population of 127.7 million, that is 34.2 establishments and 14.7 trade units per thousand residents. Sindh's 1.39 million establishments and 0.70 million trade units give lower densities, 24.9 and 12.5 per thousand, on a population of 55.7 million. Khyber Pakhtunkhwa, with 1.00 million establishments and 0.46 million trade units, is close to Sindh on density (24.6 and 11.2 per thousand). Balochistan's 0.30 million establishments and 0.15 million trade units, on 14.9 million residents, are 20.4 and 10.2 per thousand. Trade's share of all establishments is in fact highest in Sindh and Balochistan (50.2 and 50.0 per cent) and lowest in Punjab (43.1 per cent), where agriculture-linked units and a thicker manufacturing layer take up more of the local mix.

Persons engaged per trading establishment are 2.2 in Punjab, 2.0 in Khyber Pakhtunkhwa, 2.2 in Balochistan and 2.7 in Sindh. The Sindh figure is pulled up by Karachi's districts, where trading units are still small by any corporate standard and yet larger than the kiriyana average in the rest of the frame.

Table 4: Establishments, trade units and density by province, Economic Census 2023/24

	Pop. 2023	Estab.	Per 1,000	Trade units	Trade / 1,000	Trade share (%)	Persons / trade unit
Punjab	127,688,922	4,364,293	34.2	1,882,159	14.7	43.1	2.2
Sindh	55,696,147	1,385,170	24.9	695,488	12.5	50.2	2.7
Khyber Pakhtunkhwa	40,856,097	1,004,235	24.6	456,231	11.2	45.4	2.0
Balochistan	14,894,402	303,089	20.4	151,427	10.2	50.0	2.2
Four provinces	239,135,568	7,056,787	29.5	3,185,305	13.3	45.1	2.3

Establishment and trade counts are the compiled district totals in Table 2 [2]. Populations are the official 2023 Census provincial totals [6]. Persons engaged per trade unit are trade workforce divided by trade establishments.

3.2 District density of trade

Absolute counts and densities tell different stories. On counts, the commercial map is concentrated in a handful of large Punjab districts and in Karachi. Lahore has 244,481 trade units and Faisalabad 181,751. Gujranwala, Multan and Rawalpindi follow, each with more than 80,000. The seven Karachi districts together have 315,983 trade units—9.9 per cent of the four-province trade stock—on a 2023 population of about 20.4 million. The ten districts with the largest trade counts hold 31.8 per cent of all compiled trade units. Peshawar (59,960) and Quetta (48,954) are the largest stocks in Khyber Pakhtunkhwa and Balochistan.

Density, restricted here to districts with at least one million residents so that small highland and desert denominators do not dominate the ranking, rearranges that list. Karachi South has 27.8 trade units per thousand residents, well above every other large district, and is entirely urban. Faisalabad (20.0), Keamari (19.0), Quetta (18.9) and Lahore (18.8) form a second tier. Multan (16.9) and Gujranwala (15.9) sit just below. Peshawar, with a large rural hinterland inside the district boundary, has 12.6 trade units per thousand—near the four-province average of 13.3—despite a substantial absolute stock. Among large districts the thin tail is also clear: Kech (3.6 per thousand), Khyber (5.8) and Tharparkar (6.0), and a run of upper-Sindh and newly merged districts in the 8–10 range (Thatta, Bajaur, Kashmore, Badin, Jacobabad).

Two readings follow. First, metropolitan cores are commercially dense, but density is not reserved for the three largest cities: Faisalabad, Multan, Gujranwala and Quetta belong in the same band as Lahore. Second, several populous districts remain shop-thin relative to their populations. The gap between Lahore’s 18.8 trade units per thousand and Tharparkar’s 6.0 is a fact

about how unevenly premises are spread, even after population is held in the denominator.

Table 5: Leading districts by trade-unit count and by trade density (population at least 1 million)

Rank	By number of trade units	Units	Per 1,000	By density (pop. $\geq$ 1m)	Per 1,000	Units
1	Lahore	244,481	18.8	Karachi South	27.8	64,858
2	Faisalabad	181,751	20.0	Faisalabad	20.0	181,751
3	Gujranwala	94,661	15.9	Keamari	19.0	39,384
4	Multan	90,789	16.9	Quetta	18.9	48,954
5	Rawalpindi	81,825	13.4	Lahore	18.8	244,481
6	Rahim Yar Khan	74,094	13.3	Multan	16.9	90,789
7	Karachi South	64,858	27.8	Chakwal	16.1	27,926
8	Muzaffargarh	62,367	12.4	Gujranwala	15.9	94,661
9	Peshawar	59,960	12.6	Jhelum	15.9	21,929
10	Bahawalpur	58,189	13.6	Malir	15.7	38,258

Population denominators are 2023 Census district totals [6] joined to the converted PBS

Table 1 files [2]. Karachi is shown by district; the seven Karachi districts combined have 315,983 trade units, or 15.5 per thousand residents. Small districts with high ratios on a modest base—Upper Chitral is the main example—are omitted from this ranking.

3.3 Composition

Trade's share of local establishments is highest in the commercial cores and lower where agriculture-linked units fill more of the frame. In Karachi South, 63.0 per cent of establishments are in wholesale and retail trade; in Quetta 58.1 per cent; in Lahore 56.9 per cent; in Peshawar 51.7 per cent. In a band of central and north-eastern Punjab the share falls to the low thirties: Narowal 31.5 per cent, Hafizabad 31.0, Nankana Sahib 33.7, Chiniot 34.3, Toba Tek Singh 34.1. Those same districts record agriculture, forestry and fishing at 32–41 per cent of establishments. The census is counting farm-linked premises as well as shops, and in the canal colonies that farm-linked layer is thick.

Manufacturing's share of establishments is more even, and modest, once the unit of observation is the premise rather than the factory. Across the four provinces manufacturing is 10.1 per cent of establishments in Punjab, 9.6 per cent in Sindh, 9.0 per cent in Khyber Pakhtunkhwa and 6.9 per cent in Balochistan. Even Gujranwala, Sialkot, Sheikhpura and Faisalabad—districts known for industry—have manufacturing shares of establishments in the 9–12 per cent range, because the census manufacturing category includes small production shops alongside factories. Table 3 has already shown how rare the factory unit type is: 22,815 factories in the four-province frame against 2.75 million

retail shops. Other service activities (PSIC 94–96) are 13–14 per cent of establishments in every province and are a stable background category rather than a regional marker.

Scale inside trade remains micro almost everywhere. Lahore’s 3.1 persons engaged per trading establishment is high for this frame; the provincial means stay between 2.0 and 2.7. The “missing middle” documented in the national briefs is visible here as a district fact: the geography of commerce is a geography of very small units [9].

Table 6: Sector shares of establishments by province (per cent)

	Trade (45–47)	Manuf. (10–33)	Other services (94–96)	Agric. (01–03)
Punjab	43.1	10.1	12.9	19.2
Sindh	50.2	9.6	13.8	7.3
Khyber Pakhtunkhwa	45.4	9.0	13.9	13.4
Balochistan	50.0	6.9	14.2	8.2

Shares are compiled from district Table 1 blocks [2]. Remaining sectors—education, health, accommodation and food, public administration and others—make up the residual.

3.4 A simple typology

Reviews of retail-outlet geography find the same regularities in other settings: shops cluster with population and transport, cores remain dense, and thin hinterlands persist [26]. The stock, the densities and the sector mix sort the 135 districts into four descriptive types. Commercial cores combine a large or mid-sized stock of trade units with a high trade share of establishments and, in most cases, high density. Karachi South, Lahore, Quetta, Keamari and Faisalabad are the clearest members. Peshawar belongs on the absolute-stock criterion and on trade share, with density held down by the rural part of the district. These are the places where the corporate register and night-lights in the next two sections are most likely to coincide with the census map. Mixed industrial-commercial districts have large establishment totals and a lower trade share, with a visible manufacturing or farm-linked layer beside the shops. Gujranwala, Sialkot, Sheikhpura, Kasur, Gujrat and Chin-iot are of this type. Commerce is present in volume—Gujranwala’s 94,661 trade units would lead several provinces—yet it shares the premise stock with workshops and, in the canal districts, with agriculture-linked units. Populous,

shop-moderate districts have a million or more residents and trade densities at or below the four-province mean. Rawalpindi (13.4 per thousand), Rahim Yar Khan (13.3), Muzaffargarh (12.4) and a long list of southern Punjab and upper-Sindh districts fall here. The absolute number of shops is often large because the population is large; the premise cover per resident is ordinary. Sparse and peripheral districts have both a small stock and a low density. Kech, Washuk, Kohlu, the Kohistan districts, Orakzai, Khyber, South Waziristan and Tharparkar are representative. Trade shares of establishments can still be near half, as in Balochistan as a whole; what is scarce is the number of premises relative to territory and population. These districts are the counterpart to the cores in any later discussion of where formal companies and night-time radiance have, or have not, thickened. Whether cores are also the places of fastest subsequent activity, and whether sparse districts are seeing catch-up in the corporate register, are questions for the SECP and lights layers rather than for the 2023 count of shops.

4. Formalisation and new company formation

The Economic Census counts premises. The Securities and Exchange Commission of Pakistan counts companies. Putting the two official series on the same provincial map gives a first measure of how much of enumerated commerce has taken corporate form, and where new companies are being registered after the census year.

4.1 Disconnects or differences

At the close of 2023–24 the Commission reported 222,697 registered companies, after 27,542 incorporations in that year [12]. Subsequent releases put the register above 258,000 by the end of 2024–25 and at 294,101 by April 2026 [13, 15]. Against the published census stock of 7.14 million establishments, the corporate register is 4.1 per cent of the establishment count at the later date, and 3.1 per cent at mid-2024 [8, 12]. Against the 3.22 million trade establishments in the published national briefs, the entire company register—trading firms plus every other sector—is still about one company per eleven trading premises [10, 15].

PIDE’s earlier reconstruction of wholesale and retail trade pointed in the same direction: NTN holders were estimated at 17.2 per cent of WRT establishments, and return filers at 5.9 per cent [16]. The SECP register is narrower still, because a national tax number can attach to an unincorporated business. Most of the 2.75 million retail shops in the compiled unit-type files are outside the corporate form [4]. Survey evidence from Lahore wholesale and retail micro-entrepreneurs points the same way: only a small minority operate at full formality, and most sit on a continuum between registered and unregistered practice [28]. Cross-country work on entrepreneurship in emerging markets likewise treats formal registration as a conditional, institutionally mediated choice rather than an automatic upgrade of the shop stock [27].

The gap is also a provincial one, and Islamabad Capital Territory is the exception that clarifies the rule. The Commission’s 2023–24 incorporations were 11,465 in Punjab, 8,626 in Islamabad, 4,094 in Sindh, 2,248 in Khyber Pakhtunkhwa, 623 in Gilgit-Baltistan and 486 in Balochistan [12]. Relative to the compiled establishment stock, those flows amount to 0.26 new companies per hundred establishments in Punjab, 0.30 in Sindh, 0.22 in Khyber Pakhtunkhwa and 0.16 in Balochistan. Islamabad, with an establishment stock of the order of 87,000 in the Gallup reading of the census, recorded 8,626 new companies in a single year—almost ten new companies per hundred enumerated establishments [11, 12]. The capital is a registered-office magnet. The four provinces remain a landscape of unincorporated units with a thin annual overlay of companies.

Table 7: Census establishments and the SECP company register

	Establishments	Companies	Companies as % of estab.
Published national stock, 2023/24	7.14 million	—	—
SECP register, 30 June 2024	—	222,697	3.1
SECP register, April 2026	—	294,101	4.1
Trade establishments, published national	3.22 million	294,101 (all sectors)	9.1

The company column in the last row is the entire SECP register, all sectors included [8, 10, 15]. A trading-only company stock at provincial level is still unpublished in machine-readable form. Percentages use the 7.14 million published establishment total.

Table 8: New incorporations, 2023–24, beside the compiled establishment stock

	Census establishments	New companies, 2023–24	New co. per 100 estab.
Punjab	4,364,293	11,465	0.26
Sindh	1,385,170	4,094	0.30
Khyber Pakhtunkhwa	1,004,235	2,248	0.22
Balochistan	303,089	486	0.16
Islamabad Capital Territory	~87,000	8,626	~9.9
Gilgit-Baltistan	—	623	—

Establishment counts for the four provinces are from Table 2 [2]. The ICT establishment figure follows Gallup Pakistan’s reading of the census [11]. Incorporation counts are from the SECP Annual Report 2024 [12].

4.2 Where formal firms are appearing

The provincial ranking of new companies follows the census ranking of establishments, with one displacement. Punjab leads both series. Sindh is second in the establishment stock and third in incorporations once Islamabad is counted separately. Khyber Pakhtunkhwa and Balochistan trail on both. What the incorporation series adds is the capital’s weight in the corporate flow and a documented spread toward smaller cities.

In the first four months of 2025–26 the Commission registered 14,802 companies, 99.9 per cent of them through the eZfile portal [14]. Punjab accounted for 7,476 of those registrations, Islamabad 3,230, Sindh 2,197, Khyber Pakhtunkhwa 1,320, Gilgit-Baltistan 337 and Balochistan 242. The Commission noted that nearly 30 per cent of the total originated in some 250 cities and towns outside Lahore, Karachi and Islamabad, and named Layyah, Burewala, Bhakkar, Pakpattan, Hasilpur, Chaman, Gwadar, Zhob, Turbat, Bannu, Kohat, Tank, Swat, Mansehra, Thatta, Larkana, Dadu, Rohri, Hunza and Gilgit among them. April 2026, a record month of 4,082 incorporations, reproduced the same geography: Punjab 51 per cent, Islamabad 18 per cent, Sindh 15 per cent, Khyber Pakhtunkhwa 8 per cent, Gilgit-Baltistan 7 per cent, Balochistan 2 per cent [15].

Sector tags on the new companies only partly overlap the census trade category. Information technology and e-commerce led the four-month 2025–26 tally with 2,999 registrations (20.3 per cent). Trading followed with 1,954 (13.2 per cent), then services with 1,807 and real estate development and construction with 1,393 [14]. In April 2026 trading was again second, with

757 companies after 832 in information technology and e-commerce [15]. Trading is a persistent corporate sector. It is no longer the leading one. The corporate margin of Pakistani commerce is tilting toward digitally registered IT, e-commerce and services firms, many of them with registered offices in Islamabad or Lahore and with operational footprints that the establishment census would record, if at all, as small service units. Evidence from family-owned retail shops in Pakistan suggests that digital platforms can support informal transactions without pulling the shop itself into corporate form [29]. That reading fits a register now led by IT and e-commerce companies sitting above a still-unincorporated shop base.

Private limited companies were 59 per cent of the four-month 2025–26 registrations and single-member companies 37 per cent [14]. The corporate overlay is itself a micro overlay: most new companies are closely held vehicles rather than multi-establishment chains. That is consistent with PIDE’s count of about 134 retail chain-store brands, concentrated in Lahore, Karachi and Islamabad–Rawalpindi [18]. Chains are visible in the large-city cores of Section 3.4. They are a small fraction of the 2.75 million retail shops.

Table 9: Sector mix of new SECP registrations, July to October 2025

Sector	New companies	Share of period total (%)
Information technology and e-commerce	2,999	20.3
Trading	1,954	13.2
Services	1,807	12.2
Real estate development and construction	1,393	9.4
Tourism and transport	1,042	7.0
Education	787	5.3
Food and beverages	751	5.1
Other sectors	4,069	27.5
Total	14,802	100.0

SECP press release of 12 November 2025 [14]. “Other sectors” aggregates the remaining published headings (mining, marketing, textiles, pharmaceuticals, agriculture, healthcare, and the rest).

4.3 Reading the sources together

The commercial cores of Section 3.4 are also the provinces and cities that dominate the corporate flow. Punjab’s 61.8 per cent of compiled establishments and its 42 per cent of 2023–24 incorporations (11,465 of 27,542) are the same

regional concentration seen from two official windows [2, 12]. Karachi and Lahore carry both the thickest shop stock and a large share of trading and services companies. Quetta and Peshawar, the provincial cores, have the largest establishment counts in Balochistan and Khyber Pakhtunkhwa and belong to the same broad pattern, even though their annual incorporation numbers remain small.

Formalisation intensity, measured as new companies per hundred census establishments, is another matter. Islamabad is in a class of its own. Among the four provinces the rates in Table 8 are tightly bunched between 0.16 and 0.30. Balochistan's establishment stock is already the thinnest per resident; its corporate flow is thinner still. Sindh's rate is slightly above Punjab's, which is consistent with Karachi's role as a corporate domicile for firms whose premises may sit in other districts. The census density map and the incorporation map therefore agree on where the majority is and diverge on where the corporate form is disproportionately used.

The secondary-town list in the Commission's releases is the one element that the district census stock, taken alone, would miss [14, 15]. Layyah, Bhakkar, Pakpattan, Swat, Gwadar and Hunza are district headquarters or small cities inside the shop-moderate and sparse types of Section 3.4. Their appearance in the incorporation record is evidence that digital registration has reached beyond the three metropolitan cores. It is evidence of registered offices and legal vehicles, which may or may not coincide with a new storefront in the same town.

5. Change over time

The 2023/24 census is a stock. Two public series give the country a history against which that stock can be read: the Pakistan Institute of Development Economics' reconstruction of wholesale and retail trade since 1988 [16], and the SECP's annual count of new companies [12, 13]. District night-time lights remain the intended spatial proxy for the same question—whether activity has thickened in the cores of Section 3.4 or in the shop-moderate and sparse districts—and the method for that merge is set out first.

5.1 Method

VIIRS annual composites from the Earth Observation Group at the Colorado School of Mines give a cloud-screened radiance field at roughly 500 metres from 2012 onward [19]. Pakistani applications of the same family of data have already allocated provincial GDP and estimated district growth, including provincial and district rates [20], the Khyber Pakhtunkhwa night-light GDP study [21], and the Azad Jammu and Kashmir district GDP estimates [22]. Data Darbar's processed layer uses monthly VIIRS from June 2020 to 2026 at tehsil level, with a flag on tehsils below one person per square kilometre so that snow and desert albedo are less likely to be read as activity [25]. At intra-urban scale, radiance is better read as a joint function of density, infrastructure and activity than as a welfare measure [23]. Harmonized night-light series improve the case for using lights as a subnational development proxy where official GDP is thin [24].

5.2 Two national series

Table 10 restates the two public series that the draft treated as Figure 5.1. An average annual increase of 4.14 per cent in WRT establishments since 1988, ending at the Institute's estimate of 2.66 million, implies a 1988 stock of about 0.64 million units, 1.28 million by 2005 and 1.92 million by 2015 [16, 17]. The 2023/24 census count of 3.22 million units in PSIC 45–47 sits above that path [3, 10]. The two figures are different objects: PIDE's series is a reconstructed national estimate of wholesale and retail trade; the census is a full enumeration of trade premises, including repair of motor vehicles and motorcycles, on a geo-coded building frame. The useful reading is that both describe a sector that has multiplied several times over a generation, and that the census stock is the larger, more complete count at the end of that generation.

Output in the same PIDE reconstruction rose faster still, at 6.50 per cent a year [16]. Premises increased; value added per premise increased with them. That is consistent with the micro scale in Table 4—about 2.3 persons engaged per trading establishment in the compiled frame—and with a long rise in turnover inside those small units.

New SECP registrations were 16,929 in 2019–20, jumped to 25,533 in 2020–21 as online filing widened, and then ran at 26,502, 27,746 and 27,542 in the next three years [12]. The July 2025 release puts 2024–25 above 35,000, a 27 per cent increase on 2023–24, with the register itself moving from 222,697 companies at 30 June 2024 to more than 258,000 a year later [13]. The timing matters for interpretation. The step-up after 2019–20 is in large part the eZfile portal and related facilitation; it is a formalisation surge as much as a surge in new physical outlets. Trading remains a large heading inside that flow, as Table 9 showed, while information technology and e-commerce have taken the lead.

Table 10: Two public series of change in Pakistani commerce

Panel	Series	Value
A. Establishments	Implied WRT stock, 1988 (PIDE path)	≈ 0.64 million
	WRT stock, PIDE reconstruction (end of series)	2.66 million
	Average annual growth in WRT establishments since 1988	4.14%
	Average annual growth in WRT output since 1988	6.50%
	Census stock, PSIC 45–47, 2023/24	3.22 million
B. Companies	New SECP registrations, 2019–20	16,929
	New SECP registrations, 2020–21	25,533
	New SECP registrations, 2021–22	26,502
	New SECP registrations, 2022–23	27,746
	New SECP registrations, 2023–24	27,542
	New SECP registrations, 2024–25	> 35,000
	Company register, 30 June 2024	222,697
	Company register, end-2024–25	> 258,000
	Company register, April 2026	294,101

Panel A: SIDDIQUE [16]; PIDE [17]; PBS / Gallup Pakistan reading of the Economic Census 2023/24 [3, 10]. Panel B: SECP [12]; SECP [13]; SECP [15]. The 2024–25 figure is recorded as “over 35,000” in the July 2025 release.

5.3 Implications for district types

Until district radiance is on the same file as Table 5, the implications for the four types in Section 3.4 are directional.

Commercial cores already hold a disproportionate share of the 2023 stock and of new companies. Lights work on Pakistan and the wider South Asian sample has usually found persistence: places that are bright remain bright [20, 24]. The test for a revision is whether Karachi South, Lahore, Faisalabad,

Quetta and Keamari also show above-average radiance growth after 2012, or whether their lights are high and flat while secondary districts catch up.

Mixed industrial-commercial districts—Gujranwala, Sialkot, Sheikhupura, Kasur—are the places where factory lighting and workshop lighting will inflate radiance relative to shop counts. A high light-growth rate there is consistent with industry as much as with new retail. The census manufacturing share of establishments, already shown to be modest, will need the factory unit-type count beside the lights ranking before those districts are read as commercial catch-up.

Populous, shop-moderate districts and the sparse periphery are where a lights ranking would add the most. A district with 9–12 trade units per thousand residents in 2023 and a steep radiance increase after 2012 is a candidate for recent thickening that the stock, taken alone, understates. A sparse district whose lights are flat is consistent with the thin premise cover already measured. The SECP secondary-town list (Layyah, Bhakkar, Swat, Gwadar, Hunza and the rest) supplies names to look up first in that ranking [14].

The national historical anchor is already firm enough for the close of a short paper. Commerce in Pakistan has added premises at about four per cent a year for a generation on the PIDE path; the 2023/24 census finds more than three million trade units and 2.75 million retail shops at the end of that path; the corporate register has been adding companies at a rising rate, still equal to only a few per cent of the establishment stock [2, 15, 16]. Growth, in other words, is the background condition.

6. Discussion and conclusion

6.1 Information from the layers

The census stock, the company register and the two national time series describe the same economy from different official windows. Commerce in the four provinces is a field of 3.19 million trade establishments and 2.75 million retail shops, almost all of them micro units of two or three persons engaged [2, 4]. Forty-five per cent of all compiled establishments are in wholesale and retail trade. That share is higher in Sindh and Balochistan than in Punjab, where agriculture-linked premises take up more of the local mix. Density, once

population is in the denominator, still favours a short list of cores—Karachi South, Faisalabad, Keamari, Quetta, Lahore, Multan, Gujranwala—while populous districts in upper Sindh, the merged districts of Khyber Pakhtunkhwa and much of Balochistan remain shop-thin [6]. Ten districts hold 32 per cent of the compiled trade stock. Karachi’s seven districts together hold 10 per cent.

The corporate layer is small beside that stock and is organised differently. Registered companies were 3.1 per cent of published census establishments in mid-2024 and 4.1 per cent by April 2026 [12, 15]. New incorporations per hundred establishments in 2023–24 ran at 0.16 to 0.30 in the four provinces and near ten in Islamabad Capital Territory. Trading is a persistent heading among new companies and is no longer the leading one; information technology and e-commerce have taken that place [14]. The Commission’s own releases put about three in ten recent registrations in some 250 cities and towns outside Lahore, Karachi and Islamabad. Formalisation, on this evidence, is a thin, metropolitan-skewed rim that has begun to include secondary district headquarters.

The time series place both facts in a longer expansion. On the PIDE path, wholesale and retail establishments have grown at 4.14 per cent a year since 1988, from an implied 0.64 million units to 2.66 million, with output rising faster at 6.50 per cent [16]. The census count of 3.22 million trade units is the larger, enumerated stock at the end of that path. Company registrations stepped up after 2019–20 as online filing widened and exceeded 35,000 in 2024–25 [13]. Growth in premises and growth in legal vehicles are both established at national level. What remains spatially open is whether radiance after 2012 has thickened in the cores, in the mixed industrial-commercial districts, or in the shop-moderate and sparse types named in Section 3.4 [19, 20].

The three layers therefore agree on concentration and on expansion, and they part on form. The mass of Pakistani commerce is unincorporated retail. The growth of that mass is measured in decades. The corporate form is recent, digital and still small.

6.2 Effect and impact

Municipal market policy and SME programmes that treat “commerce” as a single object will miss the typology. Cores already have dense premise cover and a disproportionate share of companies; the binding constraints there are more likely to be congestion, titling, tax administration and the terms on which micro units graduate into the missing middle. Shop-moderate and sparse districts have the opposite problem: few premises per resident and a corporate flow that is thinner still. A utility-store series or a bazaar-upgrading programme in those districts is a different instrument from a company-law reform that mainly shows up in Islamabad’s incorporation count.

Formalisation policy has the same split. eZfile has raised the annual flow of companies and has reached named secondary towns [12, 14]. The formalisation ratio in Table 8 shows how far that flow still sits from the establishment stock. A target defined on company registrations will move the rim. A target defined on shops per thousand residents, or on persons engaged in trade, will move the mass. Both targets are legitimate; they are different targets. Provincial planning departments that now have district Table 1 and Table 2 files can at least set them separately [2, 4].

The Statistical Business Register promised as a census output is the instrument that would join the two [1]. A register with district location, PSIC code, unit type and a date of birth would turn Section 3 into a panel and would make Section 4’s provincial ratios into district ratios. Until that file is public, night-time lights are the practical spatial proxy for change, and the SECP town list is the practical qualitative list of places to watch [14, 19].

Secondary cities are the interesting margin for a follow-up paper. Faisalabad already belongs with the cores on density. Gujranwala, Multan, Peshawar, Quetta, Sialkot and a string of Punjab canal-colony districts have large absolute stocks and mixed sector composition. Layyah, Swat, Gwadar and Hunza appear in the incorporation record with modest census densities. Those names are where a lights ranking and, later, a business register would most change the present map.

6.3 Limits and next measurement steps

The limits follow from the sources and have already disciplined the design. The census is a 2023/24 stock; household enterprises sit on a separate, larger count; Islamabad, Gilgit-Baltistan and Azad Jammu and Kashmir enter only through published summaries; district titles required a concordance; small-district densities are sensitive to the population denominator. Incorporations are companies, often with a registered office in one place and premises in another, and the 2020–21 step-up in Panel B of Table 10 is in part a filing reform. Lights measure radiance [21, 23].

The next measurement steps are therefore short and ordered. First, attach annual VIIRS radiance to the 135-district file and report growth rates beside Table 5, with a flag on low-population units [19, 24, 25]. Second, request from the Commission a machine-readable list of incorporations by registered-office district and by sector, so that Table 8 can be rebuilt at the same grain as Table 5. Third, fold Islamabad into the tidy matrix once a district workbook in the Table 1 layout is posted. Fourth, keep the 2017 population totals as an alternative denominator and, where urban shares are published, split density into urban and rural parts of the same district. Peshawar's mid-range density is the warning that district boundaries mix a commercial core with a rural hinterland.

6.4 Conclusion

Pakistan's first integrated Economic Census puts more than seven million establishments on a district frame and finds trade at the centre of that frame [1]. In the four provinces compiled here there are 3.19 million wholesale and retail units and 2.75 million retail shops, 13.3 trade units per thousand residents, and 2.3 persons engaged per trading establishment. The geography of those units is uneven. A handful of cores are commercially dense; a long tail of populous and peripheral districts is shop-thin; a middle group of industrial-commercial districts holds shops beside workshops and farm-linked premises.

The corporate register covers a few per cent of that stock [15]. New companies have been arriving at a rising rate, with Islamabad far above the provincial formalisation ratios and with trading still important inside a flow now led

by information technology and e-commerce. Secondary towns appear in that flow. They remain a list rather than a district panel.

Over a generation the trading sector has added premises at about four per cent a year on the PIDE reconstruction, and output has risen faster [16]. The 2023/24 count is the enumerated stock at the end of that expansion. Growth is therefore the background. The contribution of this note is to put the present geography of that growth on the table—district by district, sector by sector, and beside the only official flow of new firms—so that a lights ranking, a public business register, or a second census can measure how the map is changing.

References

- [1] PAKISTAN BUREAU OF STATISTICS, 2024a. *Economic Census 2023* [online]. Islamabad: PBS. Available from: <https://www.pbs.gov.pk/pakistan-bureau-of-statistics-economic-statistics-production/>
- [2] PAKISTAN BUREAU OF STATISTICS, 2024b. *Economic Census 2023, Table 1: Establishments of Pakistan with respect to PSIC codes (major categories) and workforce*. District workbooks for Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan [online]. Islamabad: PBS. Available from: <https://www.pbs.gov.pk/pakistan-bureau-of-statistics-economic-statistics-production/>
- [3] PAKISTAN BUREAU OF STATISTICS, 2024c. *Economic Census 2023, Table 1: Establishments of Pakistan with respect to PSIC codes (major categories) and workforce*. National summary [online]. Islamabad: PBS. Available from: https://www.pbs.gov.pk/wp-content/uploads/2020/07/Table_1-6.pdf
- [4] PAKISTAN BUREAU OF STATISTICS, 2024d. *Economic Census 2023, Table 2: Establishments and workforce by unit type*. District workbooks for Punjab, Sindh, Khyber Pakhtunkhwa and Balochistan [online]. Islamabad: PBS. Available from: <https://www.pbs.gov.pk/pakistan-bureau-of-statistics-economic-statistics-production/>
- [5] PAKISTAN BUREAU OF STATISTICS, 2024e. *Economic Census 2023, Table 7: Establishments with respect to unit type and workforce*. National summary [online]. Islamabad: PBS. Available from: https://www.pbs.gov.pk/wp-content/uploads/2020/07/Table_7-2.pdf
- [6] PAKISTAN BUREAU OF STATISTICS, 2023. *Seventh Population and Housing Census 2023: district and provincial population totals* [online]. Islamabad: PBS. Available from: <https://www.pbs.gov.pk/digital-census/detailed-results>
- [7] PAKISTAN BUREAU OF STATISTICS, 2025. *Pakistan Labour Force Survey* [online]. Islamabad: PBS. Available from: <https://www.pbs.gov.pk/>
- [8] GALLUP PAKISTAN, 2025a. Gallup Pakistan analysis of Economic Census 2024: economic establishments. Press release, 11 September 2025 [online]. Islamabad: Gallup Pakistan. Available from: <https://gallup.com.pk/post/38968>

- [9] GALLUP PAKISTAN, 2025b. Gallup Pakistan analysis of Economic Census 2024: over 99% of establishments employ fewer than 50 workers – the “missing middle” challenge. Press release, 16 September 2025 [online]. Islamabad: Gallup Pakistan. Available from: <https://gallup.com.pk/wp/wp-content/uploads/2025/09/Economic-Census-PR-3-Workforce-in-Establishments.pdf>
- [10] GALLUP PAKISTAN, 2025c. Gallup Pakistan analysis of Economic Census 2024: sectoral distribution. Press release, 18 September 2025 [online]. Islamabad: Gallup Pakistan. Available from: <https://gallup.com.pk/post/39001>
- [11] GALLUP PAKISTAN, 2025d. Gallup Pakistan analysis of Economic Census 2024: provincial distribution of establishments. Press release, 12 September 2025 [online]. Islamabad: Gallup Pakistan. Available from: <https://gallup.com.pk/post/38977>
- [12] SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN, 2025a. *Annual report 2024* [online]. Islamabad: SECP. Available from: <https://www.secp.gov.pk/document/annual-report-2024/>
- [13] SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN, 2025b. SECP achieves record-breaking milestones in corporate registry during FY 2025. Press release, 8 July 2025 [online]. Islamabad: SECP. Available from: <https://www.secp.gov.pk/wp-content/uploads/2025/07/Press-Release-SECP-Achieves-Record-Breaking-Milestones-in-Corporate-Registry-During-FY-20252.pdf>
- [14] SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN, 2025c. Press release on company registrations, July to October 2025 (12 November 2025) [online]. Islamabad: SECP. Available from: <https://www.secp.gov.pk/>
- [15] SECURITIES AND EXCHANGE COMMISSION OF PAKISTAN, 2026. SECP record 4,082 company incorporations in April 2026. Press release, 7 May 2026 [online]. Islamabad: SECP. Available from: <https://www.secp.gov.pk/wp-content/uploads/2026/05/Press-Release-May-7-SECP-Record-4082-Company-Incorporations-in-April-2026.pdf>
- [16] SIDDIQUE, Omer et al., 2023. *The state of commerce in Pakistan: international and domestic* [online]. Islamabad: Pakistan Institute of Development Economics. Available from: <https://pide.org.pk/research/the-state-of-commerce-in-pakistan-international-domestic/>
- [17] PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS, 2024. *Can domestic trade be the engine of Pakistan's growth?* [online]. Islamabad: PIDE. Available from: <https://pide.org.pk/research/can-domestic-trade-be-the-engine-of-pakistans-growth/>
- [18] PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS, 2023. *Formal domestic retail and the story of chain stores in Pakistan* [online]. Islamabad: PIDE. Available from:

- <https://pide.org.pk/research/formal-domestic-retail-and-the-story-of-chain-stores-in-pakistan/>
- [19] EARTH OBSERVATION GROUP, 2012–2026. *Visible Infrared Imaging Radiometer Suite (VIIRS) night-time lights annual and monthly composites* [online]. Golden, CO: Colorado School of Mines. Available from: <https://eogdata.mines.edu/products/vnl/>
- [20] CHAUDHRY, Theresa Thompson, ASIF, Mahnoor and HUSSAIN, Mirza Manuchehar, 2024. Using nighttime light data to estimate sub-national GDP and growth in Pakistan [online]. SSRN working paper, 2 May 2024. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4814807
- [21] HASAN, Syed M., BEYER, Robert C. M. and HASSAN, Khawaja, 2021. *GDP of Khyber Pakhtunkhwa's districts: measuring economic activity using nightlights* [online]. Peshawar: Khyber Pakhtunkhwa Bureau of Statistics / SEED. Available from: https://kpbos.gov.pk/assets/docs/reports/NTL-Report_7th-August.pdf
- [22] PLANNING AND DEVELOPMENT DEPARTMENT, GOVERNMENT OF AZAD JAMMU AND KASHMIR, 2023. *AJ&K district GDP estimates by using nightlights data* [online]. Muzaffarabad: P&D AJ&K. Available from: https://www.researchgate.net/publication/371539191_AJK_District_GDP_Estimates_by_Using_Nightlights_Data
- [23] BIRD, Julia, ENENKEL, Markus and HOUGH, Benjamin, 2023. Mapping urban living standards and economic activity in developing countries with energy data. *PLOS ONE*. **18**(9), e0291824. ISSN 1932-6203. Available from: <https://doi.org/10.1371/journal.pone.0291824>
- [24] JHAMB, Puneet, FERREIRA, Susana, STEPHENS, Patrick, SUNDARAM, Meera and WILSON, Jeffrey, 2025. Shedding light on development: leveraging the new nightlights data to measure economic progress. *PLOS ONE*. **20**(2), e0318482. ISSN 1932-6203. Available from: <https://doi.org/10.1371/journal.pone.0318482>
- [25] SAMEEN, Hiba, 2026. *Data Darbar: processed VIIRS night-time lights at tehsil level, June 2020–2026* [online].. Available from: <https://github.com/hibasameen/datadarbar>
- [26] LUO, Xinrui et al., 2025. The evolution of retail outlet distribution: a systematic review of spatial patterns, drivers, and implications for urban development and economic growth. *Frontiers in Sustainable Cities*. **7**, 1628137. ISSN 2624-9634. Available from: <https://doi.org/10.3389/frsc.2025.1628137>
- [27] ESTRIN, Saul, MICKIEWICZ, Tomasz, STEPHAN, Ute and WRIGHT, Mike, 2019. Entrepreneurship in emerging markets. In: GROSSE, Robert and MEYER, Klaus E., eds. *The Oxford handbook of management in emerging markets*. Oxford: Oxford University Press. Available from: <https://doi.org/10.1093/oxfordhb/9780190683948.013.21>

- [28] ALI, Kiran and WILLIAMS, Colin C., 2023. We must deter, but not without trust: a case of formalising informal micro-entrepreneurs in Pakistan. *International Journal of Sociology and Social Policy*. **43**(1/2). ISSN 0144-333X. Available from: <https://doi.org/10.1108/IJSSP-02-2022-0042>
- [29] KHALID, Raja Usman and WAGNER, Ralf, 2025. Informal digital transactions: a path to value creation in base-of-the-pyramid supply chains. *International Journal of Operations & Production Management* [online]. ISSN 0144-3577. Available from: <https://doi.org/10.1108/IJOPM-11-2024-1011>

About the Author

Muhammad Usman is based at the Faculty of Social Sciences, Quaid-i-Azam University, Islamabad. His research addresses the spatial organisation of enterprise in Pakistan, the formalisation of a vast micro-commercial base, and the ways globalisation and geopolitics reshape commercial systems from metropolitan cores to the sparse periphery.

Muhammad Usman (Islamabad)

ORCID 0009-0004-1119-3458