Tab 1

Composite Economic Index Robustness in a Transitional and Localised Economy: A Comparative Analysis of the EPI, PMI, and the Enhanced Economic Vitality Index (EVI) for DCCI

A REVIEW NOTE

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Abstract

This review note assesses the robustness of composite economic indices in Bangladesh's transitional and localized economy, with a focus on the Dhaka Chamber of Commerce & Industry's (DCCI) innovative Economic Position Index (EPI), the Metropolitan Chamber of Commerce & Industry's (MCCI) Purchasing Managers' Index (PMI), and a proposed Enhanced Economic Vitality Index (EVI) for fiscal years 2025/2026. In the context of economic challenges—marked by a GDP growth rate of 3.97% in FY25, inflation (8.36%), and poverty (27.93%)—traditional indicators like annual GDP and CPI provide limited timely insights for enterprises and policymakers. The EPI, a quarterly measure of output changes in Dhaka's manufacturing and services sectors (contributing 37.37% and 51.44% to national GDP), achieves a pilot score of 0.80 ("Very High") for Q4 2024 versus Q3 2024, effectively capturing short-term business activity, sectoral granularity (e.g., RMG at 49.79% weight), timeliness, and policy relevance in a dynamic urban hub that accounts for 46% of national GDP, 40%+ employment, and exports, with per capita income nearly double the national average. The EPI captures snapshots of the remarkable resilience of the nation-state and that of Dhaka to manage complex domestic and international challenges.

A comparative analysis with global counterparts, including the ISM PMI (US), IMF EPI, and UNCTAD Productive Capacities Index, underscores the EPI's and PMI's strengths in balancing timeliness with breadth, while identifying opportunities to enhance depth, such as incorporating magnitude of changes, broader sampling, and additional dimensions like liquidity and wealth creation. Insights from analogous urban indicators in Mumbai (e.g., national PMI at 59.3 for manufacturing, supplemented by city real estate metrics), Shanghai (e.g., Caixin PMI at 51.2 amid national contraction), and Singapore (e.g., SIPMM PMI at 50.0 for stability) highlight the EPI's advantages in localized, high-frequency focus over national aggregates, which often mask urban disparities and endemic challenges. The case for localized indices like the EPI emphasizes capturing regional disparities, enhancing actionable enterprise insights, reflecting hub roles in developing economies, and drawing from precedents like the Oxford Economics Global Cities Index, which classifies Dhaka as a "Developing Megacity" with growth potential.

Building on these, the EVI is introduced as a complementary multi-dimensional arithmetic weighted index, integrating Income & Wealth Creation (30%), Liquidity & Investable Surplus (30%),

Entrepreneurship & Innovation (20%), and Fiscal Stimulus Value (20%), using normalized continuous data to emphasize structural resilience alongside activity. Its adaptability to other Bottom of the Pyramid (BOP) market cities—such as Lagos or Mumbai—is substantiated by scalable frameworks like UNCTAD's PCI extensions and city-specific indices, enabling nuanced monitoring of market dynamics for inclusive growth.

Policy recommendations advocate aligning indices with national reforms, improving data collection through stratified sampling, and ensuring governance for transparency. The EVI aims to augment existing tools like the EPI, fostering a more holistic framework for proactive decision-making in fragile, urban-centric economies. An annex explores the distinction between purely economic models and business indices, highlighting tactical enterprise needs over theoretical rigor.

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<u>**Executive Summary and Macroeconomic Context (October 2025)**</u>

Synthesis of Economic Challenges and the Need for Robust High-Frequency Data

Bangladesh's economy, valued at US$ 462 billion, is currently undergoing a significant transformation. This period is marked by considerable political shifts and persistent external pressures, creating a complex environment for economic navigation. Provisional data for Fiscal Year 2025 indicates a GDP growth rate of approximately 3.97%. This figure reflects challenging economic conditions. Such a scenario not only highlights the immediate struggles but also offers a crucial, insightful perspective into the intricate composition and operational dynamics of the national economy. Furthermore, it illuminates the roles of major economic hubs that are instrumental in shaping the country's economic vision and trajectory. The EPI captures snapshots of the remarkable resilience of the nation-state and that of Dhaka to manage complex domestic and international challenges.

In this economic landscape, there is an increasingly critical need for high-frequency economic indicators. These indicators are vital for delivering timely and granular insights into short-term economic fluctuations. Traditional economic metrics, such as annual GDP and Consumer Price Index (CPI), are proving to be insufficient in providing the real-time guidance that is essential for both enterprises and policymakers to make informed decisions. The limitations of these traditional measures in capturing immediate economic shifts have become undeniably clear and are now widely acknowledged. This underscores the urgent requirement for more agile and responsive data to effectively manage and steer the economy through its current challenges and future uncertainties.

The Dhaka Chamber of Commerce and Industry's (DCCI) Economic Position Index (EPI) serves as a critical tool for understanding and measuring economic resilience within Dhaka, a pivotal urban center in Bangladesh. As one of the nation's most densely concentrated hubs of economic activity, Dhaka presents a complex and dynamic environment, making the EPI's insights invaluable for a wide range of stakeholders.

The EPI is almost a pioneering initiative, distinguishing itself by uniquely capturing the intricate economic functioning of the "Dhaka econosphere." This term encompasses the interconnected web of businesses, industries, markets, and consumers that define Dhaka's economic landscape. By focusing specifically on this localized yet immensely influential sphere, the EPI provides granular data and a nuanced understanding that broader national or regional indices might miss.

Furthermore, the development and application of the EPI are strategically positioned to prepare the ground for upcoming transitions into the "AI-writ tecnocene." This forward-looking perspective indicates a recognition that future economic landscapes will be heavily influenced by artificial intelligence and advanced technologies. The EPI's current data collection and analysis methodologies are likely designed to be adaptable and compatible with these future technological shifts, ensuring its

continued relevance and efficacy in an evolving economic paradigm. The insights gleaned from the EPI will therefore be crucial not only for addressing current economic challenges but also for formulating proactive strategies that leverage technological advancements for sustainable growth and resilience in Dhaka.

The structure of Bangladesh's economy is predominantly driven by industry, which accounts for 37.44% of the GDP, and services, contributing a significant 51.62%. Both sectors exhibit considerable responsiveness to quarterly fluctuations, underscoring their dynamic nature and sensitivity to economic shifts. Notably, Dhaka District plays an outsized role in the national economy, contributing a substantial 46% to the national GDP and a comparable share of public revenue. This highlights Dhaka's critical importance as an economic hub and a key driver of national prosperity.

In the current economic climate, characterized by stabilizing reserves and elevated inflation, which stands at 8.36%, the development and implementation of robust indices are paramount. These indices must be designed to effectively balance short-term economic activity with long-term structural health. Such tools are indispensable for both enterprises and regulatory bodies. For businesses, these indices would enable optimized operations, allowing them to make informed decisions that enhance efficiency and profitability. For regulators, they would facilitate the implementation of targeted policy adjustments, crucial for generating both short- and mid-term impacts and fostering sustainable economic growth. The ability to accurately assess and respond to economic indicators is therefore vital for navigating the complexities of the current economic landscape and ensuring continued stability and development.

The Paradox of Economic Indicators in a Transitional Environment

Existing economic indices present conflicting signals towards the end of 2025, underscoring significant opportunities for methodological enhancement and deeper analytical insights. Specifically, the Dhaka Chamber of Commerce and Industry's (DCCI) Economic Performance Index (EPI), an innovative tool meticulously designed to track quarterly shifts in business activity, has demonstrated promising initial results. In its pilot phase, the EPI registered a remarkable score of 0.80, categorized as "Very High," for the fourth quarter of 2024 compared to the third quarter of the same year.

This substantial score signals a robust and encouraging recovery across Dhaka's vital formal manufacturing and services sectors. The rebound is particularly noteworthy as it follows a period of recent transitions, suggesting a successful adaptation or strategic response to prevailing economic dynamics. The DCCI EPI's ability to capture such a distinct upward trend highlights its potential as a sensitive and timely indicator for policymakers, businesses, and investors seeking to understand the evolving economic landscape of Dhaka. Further analysis will be crucial to unpack the specific drivers behind this recovery, including potential policy interventions, shifts in consumer demand, or

improvements in supply chain efficiencies. The contrasting signals from other existing indices, however, necessitate a careful comparative study to identify discrepancies and refine the overall understanding of the economic environment. This comparison will also help to establish the DCCI EPI's unique contribution and its capacity to offer a more granular and relevant perspective on the local economy.

This positive business sentiment contrasts with broader social trends, such as upper poverty limits of 27.93% and extreme poverty of 9.35% in mid-2025. These developments suggest that economic gains may be concentrating in more capital-intensive formal sectors, potentially limiting broader trickle-down effects and contributing to inequality. This divergence emphasizes the value of complementary multi-dimensional indices to provide a more holistic view, ensuring policymakers address both economic activity and societal stability without over-relying on any single metric.

Building on the EPI's strengths, this paper proposes the Economic Vitality Index (EVI) as a supportive tool that integrates activity measures with structural resilience indicators, fostering proactive reforms in areas like poverty alleviation and liquidity management.

It is crucial to understand that business indices, such as the EPI, operate under a distinct philosophy when compared to purely economic models. While economic models often prioritize theoretical rigor, aiming for universal applicability and deep analytical insights into market mechanisms, business indices are designed with a primary focus on practical, tactical needs of enterprises. This fundamental distinction means that the EPI's methodology is tailored to provide actionable intelligence and guide decision-making within the business world, rather than to serve as a purely academic exercise in economic theory.

This divergence in objectives directly influences the methodological choices made during the EPI review process. For instance, certain data selection criteria, weighting methodologies, or aggregation techniques might be employed that prioritize the immediate utility and relevance for businesses over strict adherence to econometric principles. These choices are not arbitrary but are a deliberate reflection of the EPI's purpose: to offer a realistic and practical assessment of entrepreneurial performance that can be directly applied by stakeholders.

To gain a comprehensive understanding of these methodological choices and the underlying rationale, readers are strongly encouraged to consult the Annex (and also the many examples in the main text). The Annex, in particular, provides a detailed exposition of the specific methods employed, offering deeper context and clarifying why certain approaches were adopted. This will enable a more informed interpretation of the EPI's findings and a greater appreciation for its utility as a business tool.

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1.0 An Anatomical Assessment of the Economic Position Index (EPI)

The Economic Position Index (EPI) is a novel, quarterly index developed by the Dhaka Chamber of Commerce & Industry (DCCI) to measure and track short-term changes in business activity, sectoral performance, and overall economic position in Dhaka District, Bangladesh. It focuses on the manufacturing and service sectors, which together account for a significant portion of Bangladesh's GDP (37.37% and 51.44% respectively in FY24). The index is constructed using survey data from 654 respondents (365 in manufacturing, 289 in services), supplemented by secondary data (e.g., from Bangladesh Bank for banks). Key variables include output/sales changes, re-coded into binary scores (1 for increase, 0 otherwise), aggregated with weights based on sub-sector contributions to gross output or GDP share, and combined via a geometric mean to yield an EPI score between 0 and 1. In the pilot (February 2025 survey, covering Q4 2024 changes), the EPI scored 0.80, indicating "very high" economic activity change post-political transition.

The EPI captures snapshots of the remarkable resilience of the nation-state and that of Dhaka to manage complex domestic and international challenges.

Below, we provide our technical assessment of its strengths and weaknesses, suggestions for improvement, ways to enhance representativeness for the SME sector, liquidity, and wealth/income creation potential, and a proposed alternative simple equation.

1.1 EPI Strengths

The DCCI: EPI addresses key gaps in existing economic indicators (e.g., GDP, CPI, Ease of Doing Business Index) by emphasizing timeliness, granularity, and private-sector focus:

- **Timely and Responsive**: Published quarterly, it captures short-term fluctuations and seasonality, unlike annual metrics like GDP or HDI. This makes it a "pulse check" for policymakers, especially in volatile contexts like post-regime change recoveries (e.g., the 0.80 score reflects partial revival after July-September 2024 shutdowns).

- **Sectoral Granularity**: Breaks down performance by sub-sectors (e.g., RMG at 49.79% weight in manufacturing; wholesale/retail at 47.62% in services), weighted by economic contribution (gross output/GVA). This reveals intra-sectoral dynamics, such as RMG's dominance (58.6% of manufacturing respondents), aiding targeted interventions.

- **Focus on Private Sector and Output Changes**: Unlike environment-focused indices (e.g., B-READY or BCI), it measures actual output/revenue changes, making it relevant for

investment decisions. It uses a mixed approach (primary surveys + secondary data), enhancing reliability for hard-to-survey areas like banking.

- **Multidimensional and Composite**: Combines manufacturing (0.77 score) and services (0.82 score) via geometric mean, providing a balanced view. It accounts for Dhaka's outsized role (46% of national GDP, 40%+ employment and exports), serving as a proxy for national trends.

- **Policy Relevance**: Highlights actionable insights, such as the need for law/order, energy supply, and financial ecosystem strengthening. Recommendations from respondents (e.g., lower interest rates, infrastructure) add practical value.

- **Inclusivity in Sampling**: Covers diverse business sizes (49.7% micro, 20.5% large), reflecting CMSME importance, and uses judgmental sampling to target key players.

1.2 EPI Weaknesses

Despite its innovations, the EPI has methodological, scope, and data limitations that could contribute to undermine its accuracy and broader applicability:

- **Limited Scope and Representativeness**: Focused solely on Dhaka District and excluding agriculture (10.94% of GDP), it misses regional disparities and rural-urban linkages. Only covers manufacturing and select services (e.g., no IT, education, or tourism), potentially overlooking emerging sectors.

- **Sampling Bias**: Non-probability judgmental sampling (654 respondents) may introduce selection bias, favoring accessible or cooperative firms. Sub-sectors like leather/pharmaceuticals (2.7% each) have small samples, reducing precision. Informal sector underrepresentation (partially captured in transport/real estate) ignores a large part of Dhaka's economy.

- **Binary Scoring Simplification**: Recoding changes to 1/0 loses nuance on the magnitude of increases/decreases (e.g., a 1% vs. 50% rise both score 1). This could overstate stability or mask downturns.

- **Data Quality Issues**: Relies on self-reported data, with reluctance from large firms to share accurate info. Secondary data (e.g., bank advances) is limited to formal sources. The pilot is based on one quarter (October-December 2024 vs. prior), lacking longitudinal validation.

- **Geographic and Temporal Constraints**: Single-district focus limits national insights;

funding limitations hindered deeper analysis. The "very high" score (0.80) may reflect short-term rebound rather than sustained growth, without controls for external factors (e.g., global demand for RMG).

- **Lack of Broader Economic Dimensions**: Ignores liquidity (e.g., cash flows), wealth/income creation (e.g., profits, wages), or forward-looking indicators (e.g., investment intentions), focusing narrowly on output changes.

1.3. EPI Observations on General Improvements

To enhance robustness, validity, and utility:

- **Expand Scope**: Include agriculture and other districts for national coverage. Add sub-sectors like IT/services or e-commerce to reflect modernization.

- **Refine Methodology**: Shift to stratified probability sampling for better representativeness. Incorporate magnitude of changes (e.g., percentage increases) instead of binary coding, using a scaled score (0-1 based on % change).

- **Improve Data Collection**: Use digital surveys or incentives to boost response rates from large/informal firms. Integrate real-time data sources (e.g., tax filings, utility consumption) to reduce self-reporting bias.

- **Enhance Validation**: Conduct multi-quarter pilots for trend analysis. Use statistical tests (e.g., sensitivity analysis) to assess weighting impacts. Benchmark against established indices like PMI or QIIP.

- **Account for External Factors**: Adjust for seasonality, inflation, or global events (e.g., normalize scores against CPI).

- **Increase Transparency**: Publish raw data, questionnaires (from appendix), and detailed calculations for peer review.

1.4 Making the Index More Representative for the SME Sector

A particular initial observation is made for the case of the SMEs. SMEs (micro/small/medium) comprise 79.5% of respondents (49.7% micro, 19.7% small, 10.1% medium), but weights are based on output/GVA, which favors large-subsector players like RMG behemoths. This may underrepresent SMEs' role in employment (40%+ in Dhaka) and innovation.

- **Adjust Weighting**: Weight sub-sectors by employment or enterprise count (e.g., from BBS surveys) alongside output, to amplify SME voices. For example, create an SME-specific sub-index: SME Score = (Micro % * Micro Change Score) + (Small % * Small Change Score) + (Medium % * Medium Change Score).

- **Targeted Sampling**: Oversample SMEs/informal firms using cluster sampling in SME hubs (e.g., markets, industrial zones). Include SME-specific variables like access to credit or supply chain disruptions.

- **Incorporate SME Metrics**: Add questions on survival rates, job creation, or innovation (e.g., new product launches), as SMEs drive diversification.

This would make EPI a better tool for SME policy, highlighting vulnerabilities like high interest rates or bureaucratic red tape noted in recommendations.

1.5 Incorporating Liquidity of the Economy

The current EPI overlooks financial flows, despite Dhaka's role as a financial hub (750+ listed companies). Especially, the transactional nature of monetary and fiscal infusions are very important to be captured while making any enterprise level decision - as purchasing powers of the individual and the consumer markets might be different from the more conventional estimates of measures like the GDP. The existing Enterprise Performance Index (EPI) suffers from a significant oversight: it fails to adequately account for financial flows. This omission is particularly striking given Dhaka's established prominence as a regional financial hub, boasting over 750 listed companies. In a dynamic economic landscape like Dhaka's, the transactional nature of monetary and fiscal infusions holds immense importance for informed enterprise-level decision-making.

- **Add Liquidity Indicators**: Include variables like cash flow changes, accounts receivable turnover, or credit availability (from surveys). For banks, expand beyond advances to include deposit growth or NPL ratios.

- **Integration**: Create a liquidity sub-component: Liquidity Score = Average binary/scaled change in (cash reserves + credit access + transaction volumes). Weight it at 10-20% in the overall EPI.

- **Data Sources**: Use Bangladesh Bank data on M2 money supply, remittance inflows (USD 30.33B in FY25), or reserve changes (USD 26.74B) for quarterly proxies.

This would better capture economic "fluidity," e.g., post-crisis liquidity crunches.

Also, understanding the financial movements, both in financing and in equity, is crucial because the purchasing power of individuals and the consumer market can deviate considerably from more conventional economic indicators such as the Gross Domestic Product (GDP). GDP, while a useful macroeconomic measure, often provides a high-level aggregate view that may not fully capture the granular realities of real-time market liquidity, credit availability, investment trends, and the velocity of money within a specific financial ecosystem. For instance, robust financial flows could indicate a healthy and active capital market, where businesses can readily access funding for expansion, innovation, and day-to-day operations. Conversely, sluggish financial flows might signal tight credit conditions, reduced investment, or a contraction in consumer spending, all of which directly impact enterprise performance.

Although we have not included this particular area for the purpose of this review, to create a truly comprehensive and robust EPI for Dhaka, it is imperative to integrate metrics that specifically track and analyze these financial flows. This would involve incorporating data points related to:

- **Capital Market Activity:** Volume and value of stock market transactions, bond issuances, and other securities trading.
- **Banking Sector Performance:** Loan disbursement rates, deposit growth, interest rate trends, and non-performing loan ratios.
- **Foreign Direct Investment (FDI) and Remittances:** Inflows and outflows of capital, which directly influence liquidity and economic growth.
- **Government Spending and Fiscal Policy:** The impact of public expenditure on various sectors and its subsequent effect on private enterprise.
- **Digital Transactions and Payment Systems:** The increasing role of digital money transfers and their implications for financial inclusion and economic activity.

By incorporating these financial dimensions, the EPI would offer a more nuanced and accurate reflection of the business environment, allowing enterprises to make more strategic decisions, investors to assess risks and opportunities with greater precision, and policymakers to formulate more effective economic strategies tailored to the unique financial dynamics of Dhaka. Without this critical inclusion, the EPI remains an incomplete measure, potentially misleading stakeholders about the true health and potential of the enterprise sector.

1.6 Incorporating Wealth and Income Creation Potential

EPI measures activity changes but not value addition or distribution, missing wealth/income dynamics (e.g., per capita income USD 5163.6 in FY24).

- **Add Forward-Looking Metrics**: Include profitability (e.g., net profit margins), wage growth, or investment intentions (e.g., capex plans) in surveys.

- **Wealth/Income Sub-Index**: Wealth Creation Score = Average change in (profits + wages + reinvestments). Use Gini coefficients or poverty data (upper poverty at 18.7%) for context.

- **Holistic View**: Link to FDI (USD 1.71B, +20% growth) or private investment (22.48% of GDP) as proxies for long-term potential.

This would shift EPI toward assessing sustainable growth, not just short-term output.

1.7 Proposed Alternative Simple Equation

The current EPI uses a geometric mean, wherein,

EPI = √(Manufacturing Score × Service Score),

where each sector score is a weighted average of sub-sector proportions reporting increases.

This is elegant and easy but over-sensitive (subjective) to low scores in one sector (pulling the mean down) and ignores additional dimensions.

Methodological Alternative: Weighted Arithmetic Mean with Additional Components

For simplicity, DCCI: EPI might make use of an arithmetic mean to avoid over-penalizing imbalances, while adding SME, liquidity, and wealth factors:

EPI_alt = (w_m × Manuf Score) + (w_s × Service Score) + (w_sme × SME Score) + (w_liq × Liquidity Score) + (w_wic × Wealth/Income Score)

- **Weights**: w_m = 0.3 (manufacturing), w_s = 0.3 (services), w_sme = 0.15, w_liq = 0.1, w_wic = 0.15 (sum to 1; adjustable based on GDP shares/priorities).

- **Scores**: Each is a 0-1 scaled average (e.g., proportion or normalized % change in key variables).

- **How to Arrive**:

  1. Calculate sector/sub-scores as before (weighted binary or % changes).

  2. For new components: SME Score = average change across size categories; Liquidity = average change in financial flows; Wealth/Income = average change in profits/wages/investments.

3. Sum weighted scores for final EPI_alt (0-1 scale).

This maintains simplicity (linear addition) while broadening representativeness. It's less volatile than geometric mean and easier to interpret/expand. Validation would involve correlating with GDP growth or other benchmarks.

Composite Economic Index Robustness in a Transitional and Localisedl Economy:
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2.0 The Structural Anatomies of Key Economic Indices

This section delves into the structural anatomy of three pivotal economic indices tailored to Bangladesh's transitional and localized economy: the Dhaka Chamber of Commerce & Industry's (DCCI) Economic Position Index (EPI), the Metropolitan Chamber of Commerce & Industry's (MCCI) Purchasing Managers' Index (PMI), and the proposed Enhanced Economic Vitality Index (EVI). By dissecting their focus, methodologies, and scopes, this section highlights how each index captures distinct facets of economic performance, from short-term business activity to broader structural resilience, while drawing comparative insights from global analogs to underscore their robustness and adaptability. The DCCI EPI, a novel quarterly retrospective measure launched in 2025, aggregates binary-coded output and revenue changes from 654 respondents in Dhaka's manufacturing and services sectors—weighted by sub-sectoral contributions such as ready-made garments at 49.79%—yielding a pilot score of 0.80 ("Very High") for Q4 2024, emphasizing localized volatility in an urban hub that drives 46% of national GDP (Mamun, 2025). In contrast, the MCCI PMI employs a diffusion-based approach, surveying managerial sentiment across new orders, production, and inventories, with its latest September 2025 reading at 59.1 indicating expansion amid recovering demand (Financial Express, 2025). The proposed EVI advances this by adopting a multi-dimensional arithmetic aggregation of normalized continuous data across income/wealth creation (30% weight), liquidity (30%), entrepreneurship (20%), and fiscal stimulus (20%), shifting toward proactive resilience metrics. Comparative analysis extends to international benchmarks: the U.S. Institute for Supply Management (ISM) PMI, akin to the MCCI PMI, registered 49.1 in September 2025, signaling manufacturing contraction (Trading Economics, 2025a); the International Monetary Fund's (IMF) Economic Performance Index (EPI), similar to the DCCI EPI, integrates inflation, unemployment, fiscal deficits, and GDP growth into a single intuitive score (IMF, n.d.); and the United Nations Conference on Trade and Development's (UNCTAD) Productive Capacities Index (PCI), paralleling the EVI, assesses structural capabilities across human capital, institutions, and private sector development, with its 2023 second-generation update informing policy in least developed countries (UNCTAD, 2023). This structural examination not only reveals methodological trade-offs—such as timeliness versus depth—but also informs enhancements for more representative, high-frequency tools in fragile economies like Bangladesh's.

2.1 Recapping the DCCI Economic Position Index (EPI): Focus and Methodology

The EPI is designed as a focused, regional index providing granular, quarterly feedback on private-sector dynamics in Dhaka District. Its methodology is founded on a quantitative survey of 654 respondents (365 manufacturing, 289 services) gathered using non-probability judgmental sampling.

A significant characteristic of the EPI's data input is its simplification of complex economic movements. Variables tracking output and sales changes are fundamentally 're-coded' into a **binary**

scale, where 1 denotes an increase and 0 denotes no increase or a decrease. This binary approach, while simplifying data processing, results in a substantial loss of magnitude data, meaning a marginal increase is weighted identically to massive expansion. The final score is derived through the **geometric mean** of the weighted sectoral scores for Manufacturing and Services. A point of primary concern arises from the observation that the geometric mean might be mathematically rigorous but inherently punitive. It is generally appropriate for calculating compounding returns over time, but when used to aggregate normalized economic dimensions, it magnifies extreme scores. For instance, if one major sector approached zero activity, the resulting EPI score would drastically plunge, potentially exaggerating the severity of a crisis compared to an arithmetic aggregation. This characteristic implies that the EPI's stability is compromised during periods of sharp sectoral divergence.

2.2 The MCCI Purchasing Managers' Index (PMI): Diffusion and Breadth

The MCCI PMI (Metropolitan Chamber of Commerce and Industry Purchasing Managers' Index) currently stands as Bangladesh's sole established national indicator for economic activity. This crucial index is meticulously calculated on a monthly basis, providing a consistent and timely snapshot of the nation's economic health. Its robust methodology is a key factor in its reliability and widespread acceptance. This methodology is not only proven but also standardized, mirroring practices employed in approximately 50 countries globally. This international alignment ensures that the MCCI PMI's results are comparable and understandable within a broader global economic context.Forward-Looking vs. Retrospective Focus

A significant distinction of the MCCI PMI, particularly when contrasted with other potential economic indicators like an "EPI" (Economic Performance Indicator, as implied by the context), lies in its inherent design. While an EPI might be retrospectively focused, primarily analyzing past economic performance, the PMI is deliberately constructed to be *forward-looking*. Its core purpose is to assess current sentiment and expectations among purchasing managers regarding future economic conditions. This forward-looking nature makes the MCCI PMI an invaluable tool for policymakers, businesses, and investors seeking to anticipate economic trends and make informed decisions.Key Variables Assessed by the MCCI PMI

The MCCI PMI achieves its forward-looking assessment by systematically evaluating sentiment across several critical economic variables. These variables are fundamental to understanding the operational health and future trajectory of businesses. The key variables include:

- **New Orders:** This component gauges the level of new business received by companies, acting as a crucial leading indicator of future production and sales. A rise in new orders typically signals an expanding economy.
- **Output:** This variable measures the volume of goods and services produced by companies. It

directly reflects the current level of economic activity and is a vital indicator of industrial growth.

- **Employment:** The employment component assesses changes in the number of people employed by businesses. This is a significant indicator of labor market health and business confidence, as companies typically hire more when they anticipate increased demand.
- **Input Costs:** This variable tracks the prices businesses pay for their raw materials, energy, and other inputs. Fluctuations in input costs can signal inflationary pressures or deflationary trends, impacting profit margins and consumer prices.

By synthesizing the sentiment across these interconnected variables, the MCCI PMI offers a comprehensive and predictive insight into the direction of Bangladesh's economy, providing a crucial advantage over indicators that primarily focus on historical data.

The PMI uses a **diffusion index** methodology, aggregating responses based on whether conditions are reported as 'Higher' (P1), 'Same' (P2), or 'Lower' (P3) compared to the prior month.
The standard calculation formula is:

The structural choice to assign a fixed weight of 0.5 to "no change" responses mitigates the impact of extreme contractions, smoothing volatility and favoring the signaling of expansion when the index score exceeds 50. The PMI signaled expansion in September 2025, rising to 59.1 from 58.3 in August. While the EPI focuses narrowly on Dhaka's Manufacturing and Services, the PMI offers broader national coverage, explicitly including Agriculture, Construction, Manufacturing, and Services sectors.

Despite its strengths in providing real-time agility, PMI's methodology presents a temporal mismatch when applied to policy evaluation in a transitional economy. Although the PMI is monthly and forward-looking, offering a faster pulse than the quarterly, retrospective EPI , both indices still primarily capture output/sentiment dynamics. The political dynamics and economic disruptions experienced in late 2024 and early 2025 necessitate indices that monitor structural risks and reduce uncertainty. Quarterly, retrospective data, even if based on high confidence, can suffer from severe lag, meaning a policy response justified by the EPI's Q4 2024 recovery signal may be too late to address acute liquidity and inflation problems present in October 2025.

2.3 The Proposed Economic Vitality Index (EVI): Multi-Dimensional Arithmetic Aggregation

The Economic Vitality Index (EVI) hinted in the first chapter of this review is an alternative framework specifically designed to address the methodological and scope deficiencies of the EPI. Its objective is to capture broader dimensions crucial for long-term structural resilience rather than focusing solely on quarterly output.

EVI incorporates four key dimensions: Income/Wealth Creation (IWC), Entrepreneurship/Innovation (EI), Liquidity/Surplus (LS), and Fiscal Stimulus Value (FSV).

The aggregation method chosen for the EVI is the **arithmetic weighted mean** of normalized, scaled components, which stands in deliberate contrast to the EPI's geometric mean. This approach is favored because it is stable and appropriate for aggregating non-compounding indicators that represent distinct facets of economic health. The proposed general form of the EVI equation is:

The proposed weights (W_i) are based on balanced emphasis and sum to 1.0 (0.3, 0.2, 0.3, 0.2, respectively). This methodology enhances stability, as failure in one dimension does not disproportionately penalize the entire composite score, a vulnerability inherent in the geometric mean.

The fundamental differences in scope, data input, and aggregation methodology are summarized in Table 1.

Table 1: Comparative Analysis of Index Methodologies and Scope

Feature	DCCI Economic Position Index (EPI)	MCCI Purchasing Managers' Index (PMI)	Proposed Economic Vitality Index (EVI)
Calculation Method	Geometric Mean	Diffusion Index (Weighted Sum)	Arithmetic Weighted Mean
Data Input Format	Binary (1=\text{Increase}, 0=\text{No Increase})	Diffusion (Higher, Same, Lower)	Normalized, Scaled Continuous Data (0-1)
Frequency	Quarterly	Monthly	Quarterly (with monthly sub-components)
Geographical Scope	Dhaka District Only (46% GDP Contrib.)	National (Broader Sectors)	National (Expanded Coverage)
Core Focus	Retrospective Output/Sales Change	Forward-looking Business Sentiment (Breadth)	Holistic Structural Health and Resilience

The comparison distinctly underscores a discernible evolution in the design and conceptualization of economic indices. The EPI, for instance, represents an earlier generation of index design, characterized by its simpler methodology and a primary focus on local economic retrospection. It provides insights into past economic performance within a specific geographic or sectoral context, often relying on more straightforward data inputs.

Moving along the evolutionary spectrum, the MCCI PMI emerges as a more contemporary index, designed to capture national economic sentiment in a timely manner. The PMI is particularly valued for its ability to provide rapid, almost real-time, indicators of economic activity through surveys of purchasing managers regarding new orders, production, employment, inventories, and supplier deliveries. This focus on current sentiment makes it a valuable tool for short-term economic forecasting and policy adjustments.

The Proposed Economic Vitality Index (EVI) represents the culmination of this evolutionary trend, presenting an advanced and holistic proposal for economic measurement. Epistemologically, the EVI appears positioned as a significant improvement over its predecessors. It aims to address inherent limitations found in earlier indices, such as the reliance on binary data or a restricted scope of economic indicators. The EVI seeks to achieve this by incorporating continuous inputs and adopting a broader focus on economic resilience, rather than just performance or sentiment. This suggests a more sophisticated approach to data collection and analysis, potentially incorporating a wider array of quantitative and qualitative indicators to provide a more nuanced understanding of economic health and sustainability.

In practical applications, economic analysts and policymakers could leverage these indices in a complementary fashion. The EPI, despite its simpler design, could serve a vital role in validating historical economic trends or providing a foundational context for current conditions. The PMI, with its emphasis on timeliness and sentiment, would be instrumental in providing early signals of economic shifts, thereby enabling prompt responses to emerging opportunities or challenges. Finally, the EVI, with its advanced methodology and focus on long-term resilience, would be invaluable for strategic planning and the formulation of sustainable economic policies. By utilizing these indices in tandem, analysts can construct a more comprehensive and robust picture of the economic landscape, allowing for more informed decision-making across various time horizons and analytical objectives.

2.4 Overview of Similar Indices in Other Countries

Following, selected measurements analogous to the indices from other countries and international organizations, which align closely in purpose and methodology to the indices, are highlighted:
- Similar to MCCI PMI: The Institute for Supply Management (ISM) Purchasing Managers' Index (PMI) in the United States, a widely recognized diffusion-based sentiment indicator (Institute for Supply Management, 2024). Similar PMIs exist in over 40 countries, such as India's HSBC PMI or China's Caixin PMI (S&P Global, 2024a; Caixin, 2024).
- Similar to DCCI EPI: The International Monetary Fund's (IMF) Economic Performance Index (EPI), which aggregates macroeconomic variables for a retrospective view of economic health (Cihak et al., 2013; International Monetary Fund, 2024). Another close analog is the OECD Business Confidence Index (BCI), a survey-based measure of business conditions (Organisation for Economic Co-operation and Development, 2024a; Organisation

for Economic Co-operation and Development, 2024b).

- Similar to Proposed EVI: The United Nations Conference on Trade and Development (UNCTAD) Productive Capacities Index (PCI), a holistic index assessing structural economic potential and resilience (United Nations Conference on Trade and Development, 2023; United Nations Conference on Trade and Development, 2024). Other examples include the World Economic Forum's (WEF) Global Competitiveness Index (GCI) or the Fraser Institute's Economic Freedom Index, which evaluate broader economic environments (World Economic Forum, 2024).

These indices are drawn from global sources and provide comparable insights into economic trends. For a direct comparison, we have adapted the original table format to these examples.

Table 2: Select Comparative Measures

Feature	ISM Purchasing Managers' Index (PMI) - US	IMF Economic Performance Index (EPI)	UNCTAD Productive Capacities Index (PCI)
Calculation Method	Diffusion Index (Weighted Sum)	Weighted Deviations from Benchmarks (Arithmetic-like Composite)	Composite Aggregation (Multidimensional Weighted Mean)
Data Input Format	Diffusion (Higher, Same, Lower) via surveys of purchasing managers	Normalized Continuous Data (Macroeconomic rates: inflation, unemployment, deficit, GDP growth)	Normalized, Scaled Continuous Data (42 indicators across 8 components)
Frequency	Monthly	Annual or Quarterly (flexible based on data availability)	Periodic Updates (e.g., covering 2000-2022, with annual scores)
Geographical Scope	National (US; similar PMIs in 40+ countries globally)	National (US-focused in original paper; generalizable to any country)	Global (194 economies)
Core Focus	Forward-looking Business Sentiment (Manufacturing and Services)	Retrospective Macroeconomic Performance (Inflation,	Holistic Structural Capacities and Resilience (Inputs like human capital,

Feature	ISM Purchasing Managers' Index (PMI) - US	IMF Economic Performance Index (EPI)	UNCTAD Productive Capacities Index (PCI)
		Unemployment, Fiscal Balance, Growth)	infrastructure, institutions)

2.5. Detailed Explanations and Comparisons

2.5.1 ISM Purchasing Managers' Index (PMI) - Similar to MCCI PMI

This index, produced by the Institute for Supply Management, surveys over 400 purchasing executives in the US on aspects like new orders, production, employment, and inventories (Institute for Supply Management, 2024). Like the MCCI PMI, it uses a diffusion method where responses ("higher," "same," "lower") are weighted (e.g., 0.5 for higher, 0 for same, -0.5 for lower) and scaled around 50 (above 50 signals expansion). It's monthly, national in scope, and emphasizes forward-looking sentiment to predict economic cycles. Globally, equivalents include the Eurozone's S&P Global PMI or Japan's Jibun Bank PMI, covering similar sectors in 45+ economies (S&P Global, 2024b; S&P Global, 2024a). Recent examples: US at 54.0, India at 58.3 (September 2024) (Institute for Supply Management, 2024). This mirrors the MCCI PMI's breadth and timeliness but with a stronger emphasis on supply chain details.

2.5.2 IMF Economic Performance Index (EPI) - Similar to DCCI EPI

Developed in a 2013 IMF working paper, this EPI combines four macroeconomic variables—inflation, unemployment, budget deficit (% of GDP), and real GDP growth—into a single score (0-100+, where higher is better) (Cihak et al., 2013; International Monetary Fund, 2024). The calculation subtracts deviations from benchmarks (e.g., 0% inflation, 4.75% unemployment) and weights them by inverse volatility for comparability. Data inputs are continuous and normalized, with annual or quarterly frequency, initially applied to the US (1790-2012) but adaptable globally. Its core focus is retrospective assessment of overall economic health, akin to the DCCI EPI's output/sales changes, but broader (including fiscal and labor metrics). It improves on simpler indices like the Misery Index (inflation + unemployment) by adding growth and deficits, and correlates with complex ones like the Chicago Fed National Activity Index (International Monetary Fund, 2024). For instance, it graded the US Great Depression at ~65 (poor) and post-WWII booms highly.

The OECD Business Confidence Index (BCI) is another analog, using opinion surveys on production, orders, and stocks to create a standardized score (Organisation for Economic Co-operation and Development, 2024a; Organisation for Economic Co-operation and Development, 2024b). It's periodic (likely monthly), covers OECD countries, and focuses on manufacturing sentiment, blending retrospective and forward elements like a hybrid of EPI and PMI.

2.5.3 UNCTAD Productive Capacities Index (PCI) - Similar to Proposed EVI

Launched in 2021 and updated in 2023, the PCI evaluates 194 economies on their ability to produce goods and services, using 42 indicators across eight components (e.g., human capital, infrastructure, institutions) (United Nations Conference on Trade and Development, 2023; United Nations Conference on Trade and Development, 2024). It aggregates normalized data (0-100 scale) via a multidimensional weighted mean, with periodic updates (e.g., 2000-2022 data). Global in scope, its holistic focus on structural health, resilience, and potential goes beyond GDP by emphasizing inputs like energy access and private sector strength—directly paralleling the EVI's resilience-oriented approach. High scorers include Denmark (~70); low ones like Chad (<20). Countries like Rwanda and Bangladesh have improved scores, using it for policy (United Nations Conference on Trade and Development, 2024).

Similar holistic indices include the WEF Global Competitiveness Index (144 economies, weighted pillars like infrastructure and innovation) and the Fraser Institute's Economic Freedom Index (144 countries, focusing on policies for freedom and property rights) (World Economic Forum, 2024). These are annual, composite, and aim at long-term vitality. The examples demonstrate how economic monitoring evolves globally, with tools adapting to local needs while maintaining core methodologies for cross-comparison (United Nations Conference on Trade and Development, 2023; S&P Global, 2024b).

2.5.3 Comparison of the DCCI Economic Position Index (EPI) to the Oxford Economics Global Cities Index

The Dhaka Chamber of Commerce & Industry's (DCCI) Economic Position Index (EPI) is a localized, quarterly index designed to track short-term changes in business activity within Dhaka District, Bangladesh. Developed in 2025, it focuses on output and revenue shifts in the manufacturing and services sectors, which contribute 37.37% and 51.44% to national GDP, respectively (Mamun, 2025). Based on a pilot survey of 654 respondents (365 in manufacturing, 289 in services), supplemented by secondary data from sources like Bangladesh Bank, the EPI employs a binary scoring system (1 for increases, 0 otherwise) aggregated via a geometric mean, with weights reflecting sub-sectoral contributions (e.g., ready-made garments at 49.79% in manufacturing). Its pilot score of 0.80 ("Very High") for Q4 2024 versus Q3 2024 highlights post-transition recovery, emphasizing timeliness, sectoral granularity, and private-sector relevance for enterprise decisions (Mamun, 2025).

In contrast, the Oxford Economics Global Cities Index (GCI), updated in 2025, is a global comparative tool ranking the world's 1,000 largest cities across five broad categories: Economics (e.g., GDP per capita, economic growth, employment), Human Capital (e.g., education levels, population growth), Quality of Life (e.g., income inequality, life expectancy, housing affordability), Environment (e.g., air quality, natural disaster risk), and Governance (e.g., institutional effectiveness, business environment) (Oxford Economics, 2025a; Oxford Economics, 2025b). The index draws

from proprietary forecasts and diverse datasets to provide a consistent framework for assessing urban strengths and weaknesses, with scores normalized and aggregated to enable cross-city benchmarking. For instance, in the 2025 edition, cities like New York and London top the rankings due to strong economics and governance, while emerging cities like Dhaka are classified as "Developing Megacities" with potential in growth but challenges in quality of life and environment (Oxford Economics, 2025a).

Methodologically, the EPI prioritizes high-frequency, retrospective data for tactical business insights, using simple binary aggregation to ensure accessibility, though this sacrifices granularity on change magnitudes (Mamun, 2025). The GCI, however, employs a more comprehensive, forward-looking approach with normalized continuous variables and multi-dimensional weighting, allowing for predictive analysis up to 2035 (Oxford Economics, 2025b). Scope-wise, the EPI is narrowly localized to Dhaka's formal sectors, excluding agriculture and broader national elements, making it a "pulse check" for urban volatility but limited in external validity (Mamun, 2025). The GCI's global scale facilitates international comparisons, highlighting Dhaka's outsized role (e.g., as a proxy for 46% of Bangladesh's GDP) against peers like Mumbai or Nairobi, but it updates less frequently (annually) and focuses on long-term urban competitiveness rather than quarterly fluctuations (Oxford Economics, 2025a).

In terms of utility, the EPI supports immediate policy recommendations, such as energy supply enhancements or interest rate reductions, tailored to Dhaka's enterprise ecosystem (Mamun, 2025). The GCI, conversely, aids strategic planning, such as attracting FDI or addressing sustainability, by integrating environmental and governance factors absent in the EPI (Oxford Economics, 2025c). While the EPI's business-driven heuristics align with tactical needs in transitional economies, the GCI's rigorous, data-rich model provides a holistic benchmark, though it may overlook short-term local paradoxes like Dhaka's high activity amid persistent poverty (Mamun, 2025; Oxford Economics, 2025a).

2.5.4 Comparison of the DCCI EPI to Mumbai Economic Indicators

Mumbai, India's financial and commercial hub, lacks a direct equivalent to the EPI—a chamber-led, city-specific quarterly index for business activity. Instead, economic monitoring relies on national-level indicators like the HSBC/S&P Global Purchasing Managers' Index (PMI) for manufacturing and services, alongside city-focused reports on real estate and sectoral trends (S&P Global, 2025a; Savills, 2024). India's Manufacturing PMI, for example, reached 59.3 in August 2025—a 17-year high—indicating robust expansion driven by new orders and production, with a diffusion index above 50 signaling growth (S&P Global, 2025b; Economic Times, 2025). The Services PMI stood at 58.7, contributing to a Composite PMI of 65.2, reflecting strong private-sector activity amid global demand (S&P Global, 2025a; IBEF, 2025). These national metrics indirectly capture Mumbai's influence, as the city accounts for about 6% of India's GDP, 70% of capital transactions, and significant manufacturing/services output (BCG, 2025).

Compared to the EPI's binary, output-focused methodology, India's PMI uses a diffusion index based on monthly surveys of 400-500 firms, weighting responses (e.g., new orders at 30%, production at 25%) to gauge sentiment and directionality without magnitude details (S&P Global, 2025b). Like the EPI, it emphasizes timeliness for business decisions, but as a national tool, it aggregates across regions, potentially diluting Mumbai-specific insights such as real estate volatility or informal sector dynamics (Savills, 2024). City-level reports, like Savills' Mumbai Market Watch, reference the national PMI while tracking office leasing (e.g., 4.7 million sq ft in H1 2024) and vacancy rates (16.2%), providing granular data on commercial real estate as a proxy for economic health (Savills, 2024).

Scope differences are stark: The EPI targets Dhaka's manufacturing/services with SME inclusivity (79.5% micro/small/medium respondents), addressing localized challenges like liquidity and inequality (Mamun, 2025). Mumbai indicators, via national PMI, cover broader sectors but overlook urban disparities, such as Mumbai's high Gini coefficient or slum economies, though supplementary metrics like BCG's India Economic Monitor track 30+ indicators including urban unemployment (6.7% in Q2 2025) and FDI inflows (BCG, 2025). Utility-wise, the EPI's localized focus enables targeted interventions in Dhaka's transitional context, while Mumbai's reliance on national PMI supports macroeconomic policy but may underrepresent city-level volatility, as seen in post-COVID recoveries (Economic Times, 2025; Savills, 2024). An EPI-like index for Mumbai could enhance granularity, similar to calls for sub-national PMIs in India (India Briefing, 2025).

In summary, the EPI's localized, high-frequency design offers advantages in transitional settings over the GCI's global breadth and Mumbai's national-oriented indicators, though integrating elements from both could yield more robust tools.

2.5.5 Comparison of the DCCI Economic Position Index (EPI) to Shanghai Economic Indicators

Shanghai, as China's premier financial and commercial hub, does not have a direct equivalent to the DCCI's EPI—a localized, chamber-developed quarterly index focused on short-term business activity changes. Instead, economic monitoring in Shanghai relies on national-level indicators like the Caixin Manufacturing PMI and the official National Bureau of Statistics (NBS) Manufacturing PMI, supplemented by city-specific metrics such as quarterly GDP reports and the Shanghai Composite Index (a stock market benchmark). China's NBS Manufacturing PMI, for instance, stood at 49.4 in August 2025 (below the 50 threshold indicating contraction), reflecting ongoing challenges in domestic demand and trade tensions, while the Caixin PMI, which emphasizes private and export-oriented firms, rose to 51.2 in September 2025, signaling modest expansion (Reuters, 2025a; Trading Economics, 2025a). Shanghai's Q1 2025 year-to-date GDP was reported at 1,273.506 RMB billion, with the city targeting around 5% annual growth for 2025 amid structural reforms (CEIC, 2025; PR Newswire, 2025).

Methodologically, the EPI's binary scoring of output changes from 654 respondents, aggregated via

geometric mean with sector weights (e.g., manufacturing at 0.77), prioritizes timeliness and local granularity for Dhaka's transitional context (Mamun, 2025). In contrast, China's PMIs use diffusion indices from surveys of 3,000-4,000 firms nationwide, weighting factors like new orders (30%) and production (25%) to assess sentiment without capturing magnitude details, similar to the EPI but on a broader scale (S&P Global, 2025a). The Shanghai Composite Index, closing at 3,988 points on October 28, 2025 (down 0.22%), serves as a real-time market proxy but focuses on equity performance rather than direct business output (Trading Economics, 2025a). Scope-wise, the EPI is district-specific, excluding agriculture and emphasizing SMEs (79.5% of respondents), while Shanghai indicators draw from national data, potentially diluting city-level insights like real estate drags or innovation hubs, though Shanghai's GDP reports provide quarterly urban granularity (CEIC, 2025).

Utility differences highlight the EPI's role in tactical policy recommendations for Dhaka's volatility, such as liquidity enhancements (Mamun, 2025). Shanghai's PMIs and GDP metrics inform macroeconomic adjustments, like stimulus for property sectors, but may overlook localized paradoxes, such as high stock volatility amid national contraction (Reuters, 2025a). An EPI-style index for Shanghai could improve SME representation and short-term forecasting, aligning with calls for regional PMIs in China (Caixin Global, 2025).

2.5.6 Comparison of the DCCI EPI to Singapore Economic Indicators

Singapore, a city-state with a highly integrated economy, monitors activity through the Singapore Institute of Purchasing and Materials Management (SIPMM) Purchasing Managers' Index (PMI) for manufacturing, alongside a Composite PMI for the private sector. The Manufacturing PMI edged up to 50.0 in August 2025 from 49.9 in July, indicating marginal stability, while the Composite PMI reached 52.7 in July 2025, reflecting expansion driven by services and new orders (Trading Economics, 2025b; Trading Economics, 2025c). Singapore's GDP growth forecast for 2025 was upgraded to 1.5-2.5%, supported by resilient external demand in electronics and finance (Ministry of Trade and Industry, 2025a; Ministry of Trade and Industry, 2025b).

Compared to the EPI's binary, retrospective output focus from quarterly surveys, Singapore's PMI employs a monthly diffusion index from around 200-300 firms, weighting elements like new orders (30%) and employment (20%) to gauge directional trends without magnitude specifics (SIPMM, 2025; S&P Global, 2025b). Like the EPI, it prioritizes timeliness for business decisions, but as a national (and effectively city-level) tool, it aggregates across sectors without the EPI's sub-district granularity (Mamun, 2025). Scope contrasts include the EPI's emphasis on Dhaka's formal manufacturing/services (excluding agriculture) and SME inclusivity, versus Singapore's broader coverage, including electronics (a key driver) and non-manufacturing, which helps address global trade impacts (DBS, 2025; Straits Times, 2025).

In utility, the EPI aids targeted interventions in Bangladesh's transitional environment, such as poverty-linked reforms (Mamun, 2025). Singapore's PMI supports policy easing, like monetary

adjustments amid 2.8% projected growth, but may underemphasize local vulnerabilities, as seen in unemployment forecasts rising to 2.2% (DBS, 2025; Straits Times, 2025). Adopting an EPI-like localized lens could enhance Singapore's focus on SME survival amid uncertainties.

In summary, the EPI's high-frequency, urban-specific design offers tactical advantages in volatile settings over Shanghai's national-proxy indicators and Singapore's broader PMIs, though hybrid integrations could strengthen all frameworks.

Composite Economic Index Robustness in a Transitional and Localisedl Economy:
 A Comparative Analysis of the EPI, PMI, and the Enhanced Economic Vitality Index (EVI) for DCCI [draft review note]

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3.0 DCCI: EPI Index Robustness: A Quantitative Assessment

Index robustness is paramount for any economic or financial indicator aiming to provide reliable and actionable insights. It refers to the index's inherent ability to consistently deliver accurate and meaningful signals, even when faced with diverse economic landscapes, data imperfections, or varying analytical approaches. A robust index is one that, despite potential noise or minor fluctuations in its inputs, steadfastly reflects the true underlying economic conditions it purports to measure, rather than being swayed by transient anomalies or methodological weaknesses.

This comprehensive assessment of index robustness is built upon four critical criteria, each designed to scrutinize different facets of its reliability and analytical power:

1. **Sensitivity to Input Errors:** This criterion evaluates how much the index's output changes in response to small, plausible errors or variations in its underlying input data. A highly robust index will exhibit low sensitivity, meaning that minor data inaccuracies or measurement errors do not significantly distort its overall value or interpretation. Conversely, an index that swings wildly with slight input changes is considered fragile and unreliable, as its signals could be more reflective of data quality issues than actual economic shifts. This assessment often involves stress testing with simulated data errors, missing values, or outliers to understand the index's resilience.

2. **Stability Across Aggregation Methods:** This criterion examines whether the index maintains its fundamental meaning and directional trend even when different statistical or mathematical methods are employed to combine its constituent components. For instance, if an index can be constructed using arithmetic means, geometric means, or weighted averages, a robust index would yield broadly similar conclusions regardless of the specific aggregation technique chosen. Significant divergence in outcomes across different aggregation methods suggests that the index's structure is overly reliant on a particular mathematical formulation, potentially leading to arbitrary or biased results. This analysis helps ensure that the index's insights are intrinsic to the underlying economic phenomena and not merely an artifact of the chosen aggregation algorithm.

3. **Granularity/Magnitude Capture:** This criterion assesses the index's capability to accurately reflect both fine-grained changes (granularity) and the overall scale or intensity (magnitude) of the economic conditions it measures. A robust index should be able to detect subtle shifts within specific sub-sectors or regions, providing detailed insights where necessary, while also effectively conveying the broader economic trends and their relative strength or weakness. This involves examining whether the index adequately accounts for the heterogeneity of its components and if its movements accurately correspond to the actual observed scale of economic phenomena. For example, if an economic boom is widespread and intense, the index should reflect a significant upward movement, not just a moderate one.

4. **External Validity:** This criterion is perhaps the most crucial, as it determines whether the index's signals align with and are corroborated by other independent economic indicators,

real-world observations, and established economic theory. A robust index will demonstrate strong correlations with other well-regarded measures of the same or related economic phenomena, and its movements should be logically consistent with prevailing economic narratives. If an index suggests robust growth while other reliable indicators point to a recession, its external validity is questionable. This assessment often involves comparing the index's performance against benchmarks, conducting regression analyses with other economic variables, and soliciting expert opinion to ensure its relevance and credibility in the broader economic context.

3.1 Defining Robustness in Composite Economic Indices

A critical distinction must be drawn between indices that measure the *prevalence* of change and those that measure the *intensity*. Diffusion indices, such as the PMI, effectively capture the breadth of economic shifts ("how many" firms are expanding). However, the most robust indices must also incorporate the intensity ("how much") of change, alongside structural dimensions, to provide a true reflection of economic resilience. The EPI's methodology encounters severe limitations in satisfying these criteria, particularly when macroeconomic stability is threatened by high inflation or financial fragility.

3.2 EPI Robustness Critique: The Problem of Binary Scoring and Granularity Loss

The DCCI EPI's robustness is significantly challenged by its foundational data handling and aggregation choices, leading to fragility in several critical areas.

3.2.1 Flaw 1: Sacrificing Magnitude for Simplicity (The "How Much" Paradox)

The conversion of output and sales changes into a binary state (1 for any increase, 0 for no increase/decrease) represents the most acute failure in capturing granular economic shifts. This binary approach means that a marginal post-shock bounce of 1% growth is weighted the same as a substantial, sustained expansion of 50%. The consequence is that the EPI can signal a "Very High" activity level (0.80) even if the underlying average magnitude of growth is insufficient to overcome persistent cost pressures, such as the 8.36% inflation rate. Consequently, the index is highly robust in signaling the *direction* of change (upward recovery) but intrinsically fragile in measuring the *economic intensity* needed to achieve sustainable poverty reduction and real wealth creation.

3.2.2 Flaw 2: Aggregation Sensitivity and the Geometric Mean

The use of the geometric mean for aggregating the Manufacturing and Service scores introduces statistical volatility, compromising the stability of the index. While the geometric mean is mathematically punishing, its application here is inappropriate for non-compounding normalized activity scores. Had the Manufacturing score, for instance, dropped severely due to a supply chain

shock, the geometric aggregation would severely depress the overall EPI score, potentially overstating the overall economic crisis compared to a simple, less sensitive arithmetic aggregation. The fundamental design choice to prioritize a simple, high-frequency signal from the industrial core (policy mirror) appears to have compromised statistical rigor, rendering the index brittle during non-linear economic crises.

3.2.3 Flaw 3: Sampling Bias and Geographical Limit (External Validity)

The EPI's constraint to Dhaka District and its reliance on a non-probability judgmental sample of 654 businesses severely limits its external validity as a national macroeconomic tool. Dhaka drives 46\% of national GDP, but the exclusion of the volatile agricultural sector (which still contributes 10.94% of GDP) and the systematic omission of data on rural and informal economies ensure that the EPI is, at best, a reflection of the prosperity of a specific, formal economic elite. This geographical bias explains the paradoxical high activity score (0.80) concurrent with the surge in national upper poverty rates to 27.93%. The EPI is inherently unable to monitor national systemic risks related to poverty or structural inequality.

3.3 PMI Robustness Critique: The Trade-off of Timeliness and Structural Depth

The Purchasing Managers' Index (PMI) demonstrates superior methodological robustness compared to the Economic Policy Index (EPI) in several critical aspects. Its core strength lies in its standardized, monthly diffusion methodology. This approach ensures not only exceptional timeliness in reflecting current economic conditions but also facilitates direct and meaningful comparability across diverse international markets. The consistent methodology allows for a clear, apples-to-apples comparison of economic sentiment and activity, which is invaluable for global economic analysis and cross-country policy assessments.

However, despite its strengths in tracking real sector activity, the inherent structural design of the diffusion index somewhat limits its overall policy utility, particularly when the objective is to assess broader economic stability and resilience. The PMI is undeniably robust in providing a real-time "pulse" of the real sector, accurately capturing trends in output, new orders, and employment. For instance, a high PMI reading, such as 59.1 in September 2025, would strongly signal continued expansion and robust business activity.

Yet, this robust performance in the real sector can mask critical underlying vulnerabilities, especially those related to macro-financial stability. The PMI, by its nature, does not delve into the financial underpinnings of economic activity. It can indicate a thriving real economy even when the system faces severe financial constraints. For example, the aforementioned PMI of 59.1 'might' coexist with a challenging financial landscape characterized by tight liquidity conditions, perhaps evidenced by a high policy rate and sluggish private investment. These financial indicators are crucial for understanding the sustainability of real sector growth and the overall health of the economy, but they are not directly captured by the PMI.

Furthermore, a specific methodological feature within the diffusion index—the fixed weighting of 0.5 assigned to 'no change' responses—while designed to aid index stability, can inadvertently obscure significant decelerations or mask the true intensity of economic deterioration. If a substantial number of firms shift from reporting expansion to reporting 'no change,' or if the number of firms reporting decline increases sharply, this fixed weighting might smooth out the index, making the contraction appear less severe than it is in reality. This characteristic can delay the recognition of emerging systemic risks or the need for prompt policy interventions.

Consequently, while the PMI serves as an excellent tool for tracking business sentiment and short-term economic momentum, it critically lacks the necessary depth and breadth to accurately measure systemic economic resilience and, by extension, the true effectiveness of financial policy interventions. Its focus on diffusion rather than absolute levels or the underlying financial health means that policymakers relying solely on the PMI might miss crucial signals regarding financial fragility or the need for macroprudential measures to safeguard the economy against potential shocks. Therefore, a comprehensive assessment requires integrating PMI data with a broader array of macro-financial indicators to gain a holistic understanding of economic conditions and potential vulnerabilities.

The critical methodological flaws of the EPI, juxtaposed with the proposed EVI solutions, are detailed below.

Table 3: EPI Robustness Assessment: Methodological Flaws and EVI Solutions

Robustness Dimension	EPI Binary/Geometric Approach	Impact on Index Interpretation	EVI Scaled/Arithmetic Solution
Magnitude Capture	Low. Converts all positive change to '1'.	Index lacks sensitivity to economic *intensity*, potentially resulting in a "Very High" score (0.80) despite shallow growth.	High. Utilizes normalized percentage changes, directly reflecting magnitude.
Aggregation Stability	Moderate. Geometric mean is sensitive to zero/negative values, implying compounding where none exists.	Unstable if underlying components diverge sharply, potentially exaggerating a partial crisis.	High. Arithmetic mean is stable for additive, multi-dimensional inputs, reducing penalty for component-specific failure.
External Validity/Scope	Low. Limited to 654 formal Dhaka businesses; excludes Agriculture/Poverty	Fails to detect national systemic risks.	High. National scope incorporates key external factors like IWC (Poverty/Gini) and LS

Robustness Dimension	EPI Binary/Geometric Approach	Impact on Index Interpretation	EVI Scaled/Arithmetic Solution
	data.		(Reserves/FDI).

4.0 The Case for a Localized Index Like the DCCI EPI for the Dhaka Ecosystem Over a National Index

In transitional economies like Bangladesh, where economic activity is heavily concentrated in urban hubs, a localized index such as the Dhaka Chamber of Commerce & Industry's (DCCI) Economic Position Index (EPI) offers distinct advantages over broader national indices. The EPI, focused on Dhaka District, provides quarterly insights into short-term changes in business activity, sectoral performance, and overall economic position in the manufacturing and services sectors, which together account for a significant portion of Bangladesh's GDP (37.37% and 51.44% respectively in FY24) (Mamun, 2025). Constructed using survey data from 654 respondents (365 in manufacturing, 289 in services), supplemented by secondary data (e.g., from Bangladesh Bank for banks), it recodes output/sales changes into binary scores (1 for increase, 0 otherwise), aggregated with weights based on sub-sector contributions to gross output or GDP share, and combined via a geometric mean to yield an EPI score between 0 and 1 (Mamun, 2025). In its pilot (February 2025 survey, covering Q4 2024 changes), the EPI scored 0.80, indicating "very high" economic activity change post-political transition. By prioritizing localized data, it addresses the unique dynamics of a single economic powerhouse—Dhaka, contributing approximately 46% to Bangladesh's national GDP, a similar share of public revenue, 40%+ of national employment and exports, and boasting a per capita income of USD 5,163 (nearly double the national average of USD 2,820)—while national indices often dilute these insights through aggregation (New Age, 2025; Daily Star, 2025; Prothom Alo, 2025; Mamun, 2025). Below, we outline key arguments for favoring such localized approaches, drawing on the EPI's design, its assessment in the context of Bangladesh's transitional economy, and global precedents.

4.1. Capturing Regional Disparities and Localized Volatility

National indices, such as annual GDP or the Consumer Price Index (CPI), provide a high-level overview but frequently mask significant sub-national variations, leading to misguided policy and business decisions. In developing economies, urban centers like Dhaka exhibit faster growth and higher volatility than rural or peripheral areas, with the city's manufacturing sector contributing 56% and services 44% to its district economy (Daily Star, 2025; Mamun, 2025). This disparity highlights how national averages can obscure the "paradox" noted in the EPI analysis: a "Very High" score of 0.80 signaling robust formal sector recovery in Dhaka, contrasted with national poverty rates to 27.93% upper and 9.35% extreme levels in mid-2025, suggesting limited trickle-down effects and a potential rise in the Gini coefficient (Mamun, 2025).

Localized indices like the EPI excel here by focusing on granular, high-frequency data tailored to a specific geography. For instance, the EPI's sectoral breakdown—weighting ready-made garments (RMG) at 49.79% in manufacturing—reveals intra-urban dynamics that national metrics overlook, such as post-regime change rebounds in Q4 2024 versus Q3 2024, or the dominance of capital-intensive sectors amid broader social fragility (Mamun, 2025). In emerging markets, this granularity is crucial because cities often drive disproportionate growth; as per McKinsey's Urban

World report, cities in developing regions contributed significantly to global GDP, with examples like Shenzhen in China achieving over 10% growth versus a national 6.7% in earlier periods, and similar patterns in Bangalore, India (McKinsey Global Institute, 2011). More recent data from the World Economic Forum underscores how cities in Asia, Africa, Latin America, and the Middle East—such as Dhaka and Lagos—are leveraging trade shifts for growth, with urbanization rates exceeding 4% annually, yet national indices fail to isolate these engines (World Economic Forum, 2025). By contrast, localized tools enable targeted interventions, such as addressing Dhaka's liquidity crunches or SME vulnerabilities, which comprise 79.5% of EPI respondents (49.7% micro, 19.7% small, 10.1% medium) and drive innovation and employment (Mamun, 2025).

4.2. Enhancing Timeliness and Actionable Insights for Enterprises

A core strength of the EPI is its quarterly publication and retrospective focus on output changes, making it a "pulse check" for volatile environments—unlike slower national indicators that lag behind real-time needs and fall short in providing timely insights for enterprises (Mamun, 2025). In transitional settings, where external shocks like political shifts or inflation (8.36% in Bangladesh) amplify short-term fluctuations, localized indices provide immediate, tactical data for businesses. The EPI's private-sector orientation, using mixed surveys and secondary data, delivers policy-relevant recommendations, such as improving law and order, energy supply, or lowering interest rates, while its inclusivity across business sizes reflects the tactical needs of the enterprise ecosystem (Mamun, 2025).

This aligns with broader benefits in emerging markets, or Base/Bottom-of-Pyramid (BOP) markets (Mamun, 2021), where local economic analysis helps businesses understand strengths and weaknesses more predictably (World Bank, 2025a). For example, in developing countries, localized indicators allow firms to adapt quickly to shifts, leveraging local ecosystems for better performance (Henley & Partners, 2025). National indices, by averaging across diverse regions, dilute this utility; they might indicate stable national growth (projected at 4.8% for FY26 by the World Bank) while urban hubs like Dhaka face downturns (World Bank, 2025b). The EPI's heuristic-based approach, as discussed in the annex on business indices (BIs) versus purely economic models (PEMs), prioritizes practical, satisficing behaviors for operational adjustments over theoretical rigor, enabling enterprises to navigate bounded rationality in volatile contexts (Mamun, 2025).

4.3. Reflecting the Outsized Role of Economic Hubs in Developing Economies

In countries like Bangladesh, where Dhaka serves as a proxy for national trends due to its "intense geographic distribution" of economic activities, a localized index better mirrors the economy's hub-driven nature than a national one (Mamun, 2025). The document emphasizes Dhaka's role as a financial hub (750+ listed companies) and its sensitivity to quarterly fluctuations, underscoring how national metrics risk overgeneralizing and diverting resources from critical urban reforms needed for systemic stability (Mamun, 2025).

Globally, this is evident in how cities in developing regions often outperform national growth rates. Henley & Partners' 2025 report on fastest-growing cities for wealth highlights locations like Bengaluru and Ho Chi Minh City more than doubling millionaire residents over the past decade, driven by urban-specific factors absent in national aggregates (Henley & Partners, 2025). Similarly, the Population Project notes Dhaka and Lagos as among the fastest-growing cities, with economic booms tied to migration and opportunities that localized indices can better track (Population Project, 2025). Such disparities emphasize the value of city-level focus for revealing high-potential sectors and reducing inequality through localized policies.

4.4. Global Precedents Demonstrating Superior Utility

Several international examples illustrate the advantages of city-level indices in developing contexts. The Oxford Economics Global Cities Index 2025 evaluates 1,000 urban economies, including Dhaka as a "Developing Megacity," across categories like economics (GDP per person, growth) and human capital, facilitating international comparisons that highlight localized opportunities (Oxford Economics, 2025a). It benefits emerging cities by forecasting GDP surges from population and productivity gains, enabling archetype-based strategies (e.g., "Emerging Standouts" like Bengaluru) absent in national benchmarks (Oxford Economics, 2025a).

Kearney's 2025 Global Cities Index ranks 158 cities on connectivity, including developing hubs, across business activity and innovation—paralleling the EPI's focus but with forward-looking elements (Kearney, 2025). In Latin America, indices for cities like São Paulo reveal concentrated growth, allowing tailored strategies that national data overlook (McKinsey Global Institute, 2011). The Happy City Index 2025, covering indicators like economy and environment in global cities, further demonstrates how localized tools promote resilience by avoiding aggregation flaws (Happy City Index, 2025). These precedents underscore how indices like the EPI support hybrid approaches, complementing national metrics with urban-specific insights.

In retrospect, national indices, while providing valuable broad overviews of economic and business landscapes, often lack the granular detail and specific focus necessary for effective decision-making in dynamic, localized environments. This is particularly true for rapidly evolving, urban-centric ecosystems characteristic of many developing nations, such as Dhaka. In such contexts, localized indices, exemplified by the DCCI Enterprise Performance Index (EPI), offer a critical advantage.

The DCCI EPI provides precision that national aggregates simply cannot match. By zeroing in on the unique characteristics and challenges of a specific urban hub, it offers a much clearer and more accurate picture of enterprise performance. This localized focus ensures that the data collected and analyzed is highly relevant to the immediate operational environment of businesses within Dhaka.

Furthermore, the DCCI EPI delivers timeliness that is crucial for effective strategic planning. In fast-paced transitional economies, economic conditions and market dynamics can shift rapidly. A localized index can be updated and disseminated more frequently, providing up-to-the-minute

insights that allow businesses to react swiftly to emerging opportunities and mitigate potential risks. This agility is indispensable for maintaining competitiveness and ensuring long-term sustainability.

The unparalleled relevance of the DCCI EPI for transitional, urban-centric ecosystems like Dhaka cannot be overstated. These hubs are often characterized by unique infrastructural challenges, specific regulatory frameworks, distinct consumer behaviors, and a high concentration of entrepreneurial activity. A national index, by its very nature, would dilute these specificities, leading to generalized recommendations that may not be applicable or effective at the local level.

By concentrating efforts on such critical urban hubs, localized indices empower enterprises to make proactive and informed decisions. Businesses can leverage the detailed insights to identify growth sectors, optimize resource allocation, tailor marketing strategies, and enhance operational efficiencies. This proactive approach not only benefits individual enterprises but also contributes to the overall resilience and vibrancy of the local economy.

Simultaneously, the data and analysis generated by localized indices provide invaluable guidance for policymakers. Governments and urban planners can utilize these insights to formulate targeted and effective policy actions. This includes developing supportive regulatory environments, investing in critical infrastructure, designing skill development programs aligned with local industry needs, and implementing incentives that foster innovation and entrepreneurship within the urban context.

Ultimately, the combined effect of proactive enterprise decisions and well-informed policy actions, driven by the insights from localized indices like the DCCI EPI, is the acceleration of inclusive growth in developing contexts. By fostering a supportive and responsive environment for businesses to thrive, these indices contribute directly to job creation, income generation, poverty reduction, and an overall improvement in the quality of life for the urban population. They act as vital instruments for navigating the complexities of urban development and ensuring that economic progress benefits all segments of society.

5.0 Proposed Enhancements: Designing the Robust Economic Vitality Index (EVI)

The Economic Vitality Index (EVI) is meticulously designed as a statistically robust, multi-dimensional framework for assessing the health and potential of an economy. Unlike traditional metrics that predominantly focus on raw output figures, the EVI shifts its analytical lens to a more profound understanding of an economy's intrinsic structural capacity. This fundamental reorientation allows for a comprehensive evaluation of an economy's ability to achieve and sustain inclusive growth over the long term.

By moving beyond simple output measurements, the EVI delves into the underlying elements that drive economic resilience, innovation, and equitable distribution of benefits. It aims to capture the dynamism and adaptability of an economy, considering factors that contribute to both its current performance and its future prospects. This approach provides a more holistic and nuanced picture, enabling policymakers, researchers, and stakeholders to identify areas of strength and weakness with greater precision, and to formulate strategies that foster genuinely sustainable development.

5.1 Theoretical Framework for EVI: A Shift to Structural Resilience

The EVI framework mandates a holistic assessment of economic vitality, incorporating indicators of capital accumulation, equity, human development, and future productive capacity. The crucial choice of the **arithmetic weighted mean** over the EPI's geometric mean is central to achieving robustness. The arithmetic mean is less prone to distortion from extremely low component scores and permits independent weighting based on current policy priorities and national vulnerabilities. Furthermore, to ensure the arithmetic mean functions reliably, strict statistical normalization of all disparate component data (e.g., poverty percentages versus funding dollar amounts) into a consistent 0-1 scale is required. If variables are not appropriately scaled, high-value metrics could disproportionately dominate the index score, thereby compromising the intended structural balance defined by the policy weights.

5.2 Component-Level Robustness and Variable Selection

The allocation of weights within the EVI is a deliberate tactical response to the macroeconomic environment of October 2025, which is characterized by acute social fragility and high financial risk.

5.2.1 A. Income & Wealth Creation (IWC) – Weight: 0.30

This component directly counters the EPI's disregard for social equity. The high weight (0.30) is a structural measure designed to ensure that the index is stable against social fragmentation. Given the upward revision of poverty to 27.93% and persistent inflation (8.36%) , IWC variables are crucial stabilizers for the index's external validity. Key variables include the normalized percentage change in per capita income, the poverty reduction rate (with disaggregation for urban/rural disparities), and a Gini coefficient adjustment to penalize widening inequality. Incorporating the Gini coefficient

ensures that a high per capita income (USD 2,820 nationally, USD 5,163.6 in Dhaka) does not mask critical distribution failures. IWC creates strong signals for manufacturing and FMCG investments.

5.2.2 B. Liquidity & Investable Surplus (LS) – Weight: 0.30

Financial stability is a major risk in the transitional economy, with tight liquidity and banking sector fragility demanding close monitoring. The equal highest weight (0.30) assigned to LS is a policy mitigation strategy, ensuring that failure in financial conditions significantly depresses the EVI score, forcing policy attention to stabilization efforts. Key variables include the percentage change in Foreign Exchange Reserves (which stood at USD 32.12 billion), Foreign Direct Investment (FDI) net inflows (which reached USD 1.68 billion in FY25, growing 61.5% in H1 2025), private sector credit growth, and the impact of the high 10% policy rate. Explicitly linking the index to these hard financial data points shields the EVI from falsely signaling health based purely on output when financial infrastructure remains fragile. Conversely, the LS index can also generate positive expectations when solid foreign investments are concerned.

5.2.3 C. Entrepreneurship & Innovation (EI) – Weight: 0.20

This component measures the long-term structural transformation capacity of the economy. Bangladesh currently ranks \#79 globally in the startup ecosystem. While investment surged 61.5% in H1 2025, the sector faces challenges in scaling and governance. Key variables include the percentage change in startup funding raised (USD 35.92 million total funding), patent filings, and innovation sentiment captured through surveys on new product adoption. This component provides a necessary forward-looking element, counterbalancing the retrospective bias of the EPI and measuring the future productive capacity that drives competitiveness. The productive and competitive value of innovation is reflected in this measure.

5.2.4 D. Fiscal Stimulus Value (FSV) – Weight: 0.20

The FSV assesses the efficiency and strategic impact of government fiscal policy. The FY26 budget (Tk 7.9 trillion) has prioritized fiscal discipline, narrowing the deficit to 3.6% of GDP by cutting capital spending. As the government favors stability over robust stimulus, monitoring the effectiveness of limited fiscal space is paramount. Key variables include the fiscal deficit efficiency (the impact of spending on GDP growth), a reform implementation score (e.g., tax rationalization), and public investment trends. This component ensures that the EVI remains robust by checking the effectiveness of stabilization measures and their contribution to long-term vitality. The complete structure, weighting, and policy rationale for the EVI are summarized in the following table.

Table 4: Detailed Structure, Proposed Weights, and Rationale of the Economic Vitality Index (EVI)

EVI Component	Proposed Weight (W_i)	Key Variables Included (Illustrative)	Rationale for Weighting (October 2025 Context)
Income & Wealth Creation (IWC)	0.30	Per capita income change, Upper Poverty Rate (27.93%), Gini Coefficient Adjustment	Addresses critical social fragility and inequality exacerbated by high inflation (8.36%), promoting inclusive growth.
Liquidity & Investable Surplus (LS)	0.30	Foreign Exchange Reserves change (USD 32.12B), FDI Net Inflows, Private Credit Growth, Policy Rate impact	Prioritizes stabilization of external finances and domestic credit, essential given tight liquidity and high policy rate (10%).
Entrepreneurship & Innovation (EI)	0.20	Startup Funding volume (USD 35.92M), Patent Filings, Innovation Sentiment	Focuses on medium-term productivity drivers and diversifying beyond traditional sectors (RMG), supporting structural reform.
Fiscal Stimulus Value (FSV)	0.20	Fiscal Deficit Efficiency (3.6% GDP target), Reform Implementation Score, Public Investment Trends	Measures government effectiveness and responsible resource allocation in a stabilizing budget environment.

6.0 The Proposed EVI: Policy Implications and Implementation Strategy

6.1 Strategic Alignment of Indices with National Reforms

The adoption of a comprehensive index like the EVI is critical for aligning national policy with stability mandates established by international financial institutions. The components of the EVI—specifically LS and FSV—directly address the structural vulnerabilities highlighted by the IMF and World Bank, such as banking sector fragility, the need for enhanced tax revenue mobilization, and managing foreign exchange reserves. The EVI thus serves as a powerful quarterly monitoring tool to gauge the implementation effectiveness and compliance with necessary reforms.

The transition to EVI signifies a crucial shift in policy philosophy: moving from reactive economic management based on narrow, single-dimension output indicators (EPI and PMI) to proactive structural governance. By providing a transparent, multi-dimensional view of structural health, the EVI offers policymakers the necessary tools to navigate persistent challenges, such as reconciling the need for growth projections (e.g., World Bank's 4.8% FY26 projection) with the urgent requirement for poverty reduction and financial stability.

6.2 Data Collection and Validation Strategy for National EVI Rollout

Implementing the EVI requires a significant expansion of data collection beyond the localized, non-probability sampling of the EPI. The EVI necessitates a national scope, utilizing stratified probability sampling involving over 1,000 businesses to ensure accurate representation of regional disparities and sectors traditionally excluded by the EPI, such as agriculture and the informal economy.

Successful implementation relies on the integration of **mixed methods**, combining primary survey data (collected for market sentiment, innovation adoption, and net wealth addition changes) with reliable secondary hard data from agencies like the Bangladesh Bureau of Statistics (BBS), Bangladesh Bank (BB), and the World Bank for metrics such as poverty rates, foreign exchange reserves, and the Gini coefficient. A critical initial step for validation must involve back-testing the EVI against historical data to ensure its predictive power surpasses that of existing indices, particularly in identifying the systemic risks and structural failures that contributed to the economic disruptions witnessed during and after the 2024 political transition.

6.3 Recommendations for Index Utilization and Governance

To ensure the maximum policy utility and maintain the credibility of any economic index, it is paramount that the roles of existing and proposed indices are clearly delineated. Furthermore, the governance framework for these indices must place a strong emphasis on transparency and independence, thereby fostering trust and reliability among stakeholders.

First, regarding the DCCI EPI, its inherent methodological constraints necessitate a thoughtful reassessment of its purpose. Specifically, the current binary scoring system leads to a significant loss of granularity, making it less effective for detailed analysis. Coupled with its limited geographical scope, the DCCI EPI is best repurposed as a specialized, high-frequency tracker. This revised focus would restrict its application solely to monitoring the performance dynamics of the formal manufacturing and services sectors within Dhaka. This targeted approach would make it particularly geared towards meeting the specific needs of the business and enterprise sector, ensuring that its insights are directly relevant and adequately reflected in the regulatory framework governing these critical economic areas.

Second, the governance of any new index, such as the EVI, must rigorously adhere to international standards of transparency. Drawing inspiration from the established models of highly respected indices like the Index of Economic Freedom and the Purchasing Managers' Index (PMI), the EVI's operational framework must be entirely open to public scrutiny. This means that all aspects, including data sources, weighting schemes, and normalization methods, must be fully public and replicable. Ideally, the underlying data should be derived from independent, third-party sources to minimize bias and enhance objectivity. This measure is absolutely essential for building institutional confidence in the EVI and, crucially, to immunize the index against potential political manipulation. Such manipulation has, in the past, historically compromised the integrity and perceived accuracy of other international economic reports, leading to a erosion of public trust. By ensuring consistent and transparent reporting, policymakers and the public can be confident that decisions are based on the most robust, comprehensive, and unbiased assessment of the nation's economic health, promoting informed policy-making and sustainable growth.

7.0 Applicability of the EVI Index to Other BOP Market Cities and Localised Economies

The Enhanced Economic Vitality Index (EVI) could be effectively utilised for other Bottom of the Pyramid (BOP) market cities and localised economies, particularly in emerging and developing contexts characterised by economic volatility, structural transitions, and localised disparities. The EVI, as proposed in the original analysis, is designed as a multi-dimensional, arithmetic-weighted composite index that integrates key components—Income & Wealth Creation (30%), Liquidity & Investable Surplus (30%), Entrepreneurship & Innovation (20%), and Fiscal Stimulus Value (20%)—to measure both short-term economic activity and long-term structural resilience (Mamun, 2025). These elements address common challenges in BOP environments, such as liquidity constraints, inequality in wealth distribution, limited entrepreneurial ecosystems, and the need for targeted fiscal interventions, making it adaptable beyond Dhaka's context. Below, I substantiate this view with arguments drawn from the index's design, comparative examples of similar indices, and evidence of scalability in localised BOP settings.

First, the EVI's theoretical framework emphasises structural resilience in transitional economies, which aligns closely with the dynamics of BOP market cities like Lagos (Nigeria), Nairobi (Kenya), or Mumbai (India). These urban centres often serve as economic hubs in low-income regions, contributing disproportionately to national GDP while grappling with poverty, informal sectors, and external shocks—mirroring Dhaka's role (46% of Bangladesh's GDP) as described in the proposal (Mamun, 2025). The EVI's use of normalised, continuous data (e.g., percentage changes in per capita income, FDI inflows, startup funding, and fiscal efficiency) allows for customisation to local data sources, avoiding the binary scoring limitations of indices like the EPI. This flexibility is crucial in BOP contexts, where traditional metrics like GDP fail to capture high-frequency volatility or inequality (e.g., Gini coefficient rises). For instance, the EVI's Liquidity & Investable Surplus component could highlight cash flow issues in informal markets, a prevalent feature in BOP cities where remittances and microfinance play key roles, enabling policymakers to prioritise financial inclusion reforms.

Second, comparative analyses of analogous composite indices demonstrate successful adaptation to localised BOP economies. The EVI draws inspiration from the UNCTAD Productive Capacities Index (PCI), which assesses structural capabilities across categories like human capital, institutions, and private sector development—similar to EVI's entrepreneurship and wealth creation foci (Mamun, 2025). While the PCI is primarily national, it has been extended to sub-national or group-specific applications, such as a satellite version for Small Island Developing States (SIDS), incorporating localised indicators like climate resilience and trade vulnerabilities (UNCTAD, 2025). This precedent suggests the EVI could be similarly tailored for BOP cities by integrating city-level data (e.g., urban poverty rates or informal employment metrics), enhancing its utility in places like Jakarta or Manila, where BOP populations drive consumption but face systemic fragilities. Moreover, the PCI's application in least developed countries (LDCs)—many of which host BOP urban centres—has informed policy for productive transformation, showing how such indices bridge short-term tactics

with long-term development (UNCTAD, 2020).

Further evidence comes from city-specific indices in emerging markets, which have been adapted to measure economic vitality amid BOP challenges. For example, the Oxford Economics Global Cities Index evaluates urban economic vitality through metrics like wealth generation and employment, applied to over 1,000 cities including emerging BOP hubs such as São Paulo and Johannesburg (Oxford Economics, n.d.). This index's focus on localised factors (e.g., access to goods and services) parallels the EVI's holistic approach, proving that composite tools can be scaled to urban levels for benchmarking resilience. Similarly, McKinsey's Urban Sustainability Index, developed for emerging-market cities, incorporates themes like economic productivity and equity, using localised data to guide sustainable growth in BOP contexts (McKinsey & Company, 2011). In a Chinese context, an Economic Development Index (EDI) has been constructed to assess regional vitality in urban areas, combining economic quality and scale indicators to address imbalances—much like the EVI's aim to counter the "paradox" of high activity amid poverty (Wang et al., 2024). These adaptations highlight that indices like the EVI can be localised by adjusting weights or variables (e.g., incorporating BOP-specific metrics like microenterprise survival rates), facilitating enterprise decision-making (e.g., investment timing) and regulatory actions (e.g., fiscal stimuli for informal sectors).

Finally, the EVI's policy implications support its broader utilisation, as the original proposal recommends national rollout through expanded data collection and governance (Mamun, 2025). In BOP localised economies, this could involve stratified sampling from local chambers of commerce or development banks, similar to how the PCI uses national statistical offices for validation (UNCTAD, 2023). Challenges like data quality in informal-heavy BOP settings could be mitigated by integrating mixed sources (e.g., surveys with mobile money data), as seen in entrepreneurial ecosystem indices applied across 71 countries, including BOP nations (Acs et al., 2021). Overall, the EVI's emphasis on tactical enterprise needs over pure economic theory (as per the annex in Mamun, 2025) makes it particularly suited for BOP cities, where heuristics for quick decisions amid volatility are essential.

The EVI's adaptable, resilience-focused design, coupled with precedents from similar indices, substantiates its potential for other BOP market cities and localised economies. This would enable more nuanced monitoring of market dynamics, informing enterprise strategies (e.g., innovation investments) and policy reforms (e.g., liquidity enhancements) to foster inclusive growth.

8.0 Conclusion

In the context of Bangladesh's transitional and localized economy, this comparative analysis of the Dhaka Chamber of Commerce & Industry's (DCCI) Economic Position Index (EPI), the Metropolitan Chamber of Commerce & Industry's (MCCI) Purchasing Managers' Index (PMI), and the proposed Enhanced Economic Vitality Index (EVI) underscores a pivotal imperative: the need for a deeper understanding of market dynamics to inform both enterprise decision-making and

policy-level regulatory actions. As Bangladesh navigates a fragile recovery marked by a provisional GDP growth of 3.97% in FY25— inflation at 8.36%, upper poverty at 27.93%, and external pressures on foreign reserves (USD 32.12 billion as of October 2025), traditional low-frequency indicators like annual GDP and CPI prove insufficient. They fail to capture the rapid, multifaceted shifts in market conditions, such as quarterly fluctuations in manufacturing output, service sector sentiment, liquidity constraints, and social equity gaps. This analysis reveals that robust, high-frequency composite indices are essential tools for decoding these dynamics, enabling stakeholders to move from reactive measures to proactive strategies that foster resilience, inclusivity, and sustainable growth.

The EPI, as a pioneering quarterly index developed by the DCCI, exemplifies the value of localized, enterprise-driven insights. With its pilot score of 0.80 ("Very High") for Q4 2024 versus Q3 2024, it effectively highlights short-term rebounds in Dhaka's formal manufacturing and services sectors, which contribute 37.37% and 51.44% to national GDP, respectively. By aggregating binary-coded output changes from 654 respondents—weighted by sub-sectoral contributions like RMG at 49.79%—the EPI provides timely "pulse checks" that reflect the concentrated economic activity in Dhaka, accounting for 46% of national GDP and a similar share of public revenue. Its strengths in sectoral granularity, private-sector focus, and inclusivity across business sizes (49.7% micro enterprises) make it a valuable proxy for national trends in a localized economy. However, as noted in the assessment, its binary scoring and geometric mean aggregation can overlook the magnitude of changes, potentially masking underlying vulnerabilities like shallow growth or unequal wealth distribution. Similarly, the PMI offers diffusion-based breadth, capturing managerial sentiment across new orders, production, and inventories, but trades structural depth for timeliness, limiting its ability to address broader systemic risks.

These observations illuminate the core challenge: market dynamics in a transitional economy are not merely about output or sentiment but encompass interconnected elements like liquidity flows, wealth creation potential, entrepreneurial innovation, and fiscal efficiency. For instance, while the EPI signals robust activity in capital-intensive sectors, contrasting social indicators—such as extreme poverty at 9.35% and a likely rising Gini coefficient—reveal a "paradox" where economic gains fail to trickle down, exacerbating inequality and labor market instability. This mismatch arises from the inherent schism between purely economic models (PEMs), which prioritize theoretical rigor and bounded rationality for long-term simulations, and business indexes (BIs) like the EPI and PMI, which are driven by tactical enterprise needs for immediate, heuristic-based decisions. As elaborated in the annex, PEMs (e.g., DSGE models) enable counterfactual policy evaluations but often overlook real-world frictions, whereas BIs aggregate satisficing behaviors—such as directional changes in surveys—to provide leading indicators for operational adjustments. Understanding this divergence is crucial: relying solely on BIs risks a narrow focus on short-term tactics, while ignoring them dismisses the practical heuristics that enterprises use to navigate volatility.

To bridge these gaps, the proposed EVI emerges as a complementary, multi-dimensional

arithmetic-weighted index, designed to enhance robustness by integrating four key components: Income & Wealth Creation (IWC, 30% weight), Liquidity & Investable Surplus (LS, 30%), Entrepreneurship & Innovation (EI, 20%), and Fiscal Stimulus Value (FSV, 20%). Unlike the EPI's retrospective binary approach, the EVI uses normalized, continuous data—such as percentage changes in per capita income (USD 2,820 nationally), FDI inflows (USD 1.68 billion in FY25, up 61.5% in H1), startup funding (USD 35.92 million), and fiscal deficit efficiency (targeted at 3.6% of GDP in FY26)—to measure structural resilience alongside activity. This shift ensures the index is sensitive to magnitude, stable against component failures, and externally valid by incorporating national factors like poverty rates and reserves. By penalizing inequality through Gini adjustments in IWC and prioritizing financial stabilization in LS, the EVI provides a holistic view that reflects the true dynamics of a localized economy, where Dhaka's hub role amplifies national vulnerabilities but also offers leverage for targeted interventions.

For enterprises, this enhanced understanding of market dynamics translates into more informed decision-making. In a volatile environment characterized by political transitions, supply chain disruptions, and high policy rates (10%), businesses—particularly SMEs, which comprise 79.5% of EPI respondents and drive 40%+ employment in Dhaka—can use robust indices like the EVI to anticipate risks and optimize operations. For example, the LS component's focus on credit growth and reserve changes allows firms to time capital expenditures (CapEx) and manage working capital more effectively, mitigating liquidity crunches that have plagued post-crisis recoveries. Similarly, EI's emphasis on innovation sentiment and patent filings empowers entrepreneurs to diversify beyond traditional sectors like RMG, fostering adaptive strategies in response to global demand shifts or domestic reforms. By incorporating magnitude over binary signals, enterprises avoid over-optimism from "Very High" scores, instead gaining nuanced insights into "how much" growth is sustainable. This tactical utility aligns with the annex's highlighting of managerial heuristics: BIs like the EPI serve as immediate KPIs for pricing, positioning, and inventory management, while the EVI augments them with forward-looking structural signals, enabling firms to satisfice under bounded rationality rather than assume perfect optimization.

At the policy level, regulatory actions must reflect these dynamics to ensure systemic stability and equitable growth. Policymakers, including the Bangladesh Bank and Ministry of Finance, can leverage the EVI as a quarterly monitoring tool to align reforms with international mandates from the IMF and World Bank, such as enhancing tax mobilization and managing reserves. For instance, the FSV component evaluates the FY26 budget's (Tk 7.9 trillion) impact on GDP, ensuring fiscal discipline does not stifle stimulus needs amid poverty management issues. By shifting from narrow output-focused indices to the EVI's proactive framework, regulators can address the "how much" paradox—identifying when high activity masks social fragility—and implement targeted actions like interest rate reductions, infrastructure investments, or SME credit incentives. This requires expanding data collection to national, stratified sampling (over 1,000 respondents), integrating mixed methods (surveys with BBS/BB data), and ensuring governance through transparency—publishing raw data and methodologies to build credibility and resist manipulation. Ultimately, such actions mitigate

systemic mismatches, reconciling short-term enterprise needs with long-term policy goals, as per the annex's call for hybrid synthesis.

In conclusion, the imperative for understanding market dynamics in Bangladesh's transitional landscape cannot be overstated. By complementing innovative tools like the EPI with the robust EVI, enterprises gain the agility to make data-driven decisions that enhance competitiveness and resilience, while policymakers can enact regulatory measures that promote inclusive, stable growth. This dual focus not only addresses current volatilities but also positions the economy for projected FY26 improvements (e.g., World Bank's 4.8% GDP forecast), bridging the conceptual schism between theory and practice. Future research should pilot the EVI nationally, back-test its predictive power, and explore integrations with global indices to further refine this framework, ensuring Bangladesh's economic vitality endures beyond immediate transitions.

Composite Economic Index Robustness in a Transitional and Localisedl Economy:
 A Comparative Analysis of the EPI, PMI, and the Enhanced Economic Vitality Index (EVI) for DCCI [draft review note]

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Annex: An Abridged Version of the Chapeaux Note on the Conceptual Schism: Dissecting the Divergence Between Purely Economic Models and Business Indexes Driven by Tactical Enterprise Needs

Full Paper at: https://academia.edu/resource/work/144646976

AI. Summary: The Conceptual Schism between Optimization Theory and Managerial Heuristics

Economic analysis relies on two distinct frameworks: Purely Economic Models (PEMs), such as Dynamic Stochastic General Equilibrium (DSGE) or Input-Output (IO) models, and Business Indexes (BIs), like the Purchasing Managers' Index (PMI). PEMs focus on macro-level structural assessment and policy simulation, constrained by assumptions of rationality or bounded rationality (BR). BIs aggregate managerial heuristics and satisficing behaviors, offering timely signals for tactical enterprise decisions.

This divergence yields unique utilities: BIs act as leading indicators for short-term market timing, released ahead of official data, while PEMs enable robust long-run policy evaluation, addressing the Lucas Critique. Policymakers must balance theoretical consistency with operational relevance.

AII. Introduction: Defining the Dual Analytical Paradigms

Economic analysis spans macro-micro divides. Institutions need systemic policy tools for simulations, while enterprises require high-frequency signals for risk mitigation and operations. PEMs and BIs differ in purpose: PEMs are abstract and axiomatic, modeling optimized behavior; BIs derive from operational sentiment, serving supply managers and leaders.

The Axiomatic Foundation of PEMs: DSGE and EC-IO models rely on empirical content defined by restrictive theories, enabling dynamic simulations under shocks.

The Tactical Imperative of BIs: PMIs assess business conditions via categories like new orders and inventories, confirming tactical enterprise needs.

AIII. The Axiomatic and Structural Rigor of Purely Economic Models (PEMs)

A. DSGE Foundations: DSGE models assume rational expectations (REH), perfect markets, and optimization, useful for counterfactuals but criticized for overlooking frictions.

B. Bounded Rationality (BR): Simon's BR replaces global rationality with satisficing under cognitive limits. Integrated into DSGE via mechanisms like adaptive learning, BR models constraints

for empirical fit, differing from BIs' aggregation of observed outcomes.

C. Alternative PEMs: IO models detail sectoral interactions but assume fixed technology; EC-IO hybrids add dynamics via equations.

AIV. The Practical Domain of Business Indexes (BIs): Tactical Needs

BIs prioritize timeliness over theory.

A. PMI Methodology: A diffusion index from surveys, scoring 0-100 based on changes in key variables (e.g., New Orders 30%). Released monthly, it leads official data by weeks.

B. Sub-Indices as KPIs: New Orders informs CapEx; Inventories aids working capital; Supplier Deliveries tracks supply chains.

C. Role in BI Systems: BIs integrate with internal data for decisions on pricing, positioning, and strategy.

AV. Comparative Analysis: Divergence in Utility

A. Optimization vs. Heuristics: PEMs model internal calculus; BIs aggregate directional changes, incorporating real trade-offs.

B. Forecasting Mismatches: Surveys (BIs) outperform REH models short-term; PEMs excel in long-run simulations.

Table I: Comparative Axiomatics and Utility (Abridged)

Dimension	PEMs (e.g., DSGE)	BIs (e.g., PMI)
Primary Goal	Systemic policy evaluation	Timely operational guidance
Agent Behavior	REH or modeled BR	Aggregated heuristics/satisficing
Decision Logic	Optimization	Directional change
Data Structure	Official time series	Survey-based diffusion index
Release Lag	5-7 weeks	Immediate

AVI. Limitations, Hazards, and Integration Strategies

A. PEM Biases: Non-linearities (e.g., ZLB) cause parameter bias; black-box risks obscure sources.

B. BI Hazards: Subjectivity and sectoral focus require context; comparability issues in NFD.

C. Synthesis: Integrate surveys into DSGE for better shock identification; hybrid models (e.g., LSTM with PMIs) enhance predictions.

Table II: Tactical Utility of PMI Sub-Indices (Abridged)

PMI Sub-Index	Measurement	Enterprise Use Case
New Orders	Demand changes	CapEx timing (NPV)
Inventories	Stock levels	Turnover, risk mitigation
Supplier Deliveries	Supply speed	Procurement, visibility

AVII. Convergence: Reinforcing Distinct Models

BIs and PEMs serve non-fungible roles: PEMs for structural policy, BIs for tactical execution. Synthesis via adaptive learning balances theory and practice.

AVIII. References (Selected Key Sources)

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