The Rise of Indian Benchmarks: Shaping the Future of Domestic Commodity Pricing



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> *While India has historically relied on global commodity benchmarks, its growing economic footprint has triggered a shift toward domestic pricing systems. These local systems better reflect country-specific realities, trade flows, and currency advantages, helping small and medium enterprises manage risk efficiently. However, the transition from a "price-taker" to a "price-setter" is still determined by domestic balances, tariff structures, and market depth across specific commodities like copper, aluminium, and gold.*

INTRODUCTION

The history of global economic development shows that commodity prices have deeply influenced industrial profitability, investment cycles, inflation, trade competitiveness, government revenues, and consumer behaviour. Therefore, a fair and transparent pricing mechanism that closely reflects a country's demand & supply dynamics is essential to all stakeholders (producers, manufacturers, recyclers, traders, consumers, and policymakers) as well as for the long-term health of an economy.

Indian commodity prices continue to be influenced by movements in global benchmarks, keeping India largely as a price-taker. This raises an important question - can India evolve into a meaningful price maker and influencer?

For decades, Indian prices of many commodities have largely been derived from global benchmarks such as the London Metal Exchange (base metals), Brent Crude (crude oil), London Fix (precious metals), and others. However, as the Indian economy expanded, the industrial base grew, commodity consumption increased, and financial infrastructure deepened, local pricing mechanisms and benchmarks emerged through domestic exchanges, gradually gaining mainstream acceptance.

Yet, this transition remains incomplete. Indian commodity prices continue to be influenced by movements in global benchmarks, keeping India largely as a price-taker. This raises an important question - can India evolve into a meaningful price maker and influencer?

The answer is not straightforward. Let us explore.

TWO PRICING SYSTEMS

Commodity pricing broadly operates through two systems:1. International benchmarks2. Local pricing systems

International benchmarks, generally quoted in US dollars, are prices discovered through the interaction of global demand and supply on recognised exchanges, international trading hubs, or through large traders. Examples include the LME for base metals and the CME for precious metals and agricultural commodities.

The long-standing existence of these benchmarks, their time-tested contract design, proven convergence with physical markets, and deep trading liquidity (supported by active participation from producers, consumers, traders, and institutions) have helped them gain widespread trust across the industry.

Local pricing, on the other hand, evolves around domestic factors and is typically denominated in local currency. These systems reflect country-specific demand and supply dynamics, import as well as export duties, non-tariff barriers, local taxes, transportation costs, currency movements, inventory conditions, and other domestic factors.

A country may operate under an international pricing system, a local pricing system, or a combination of both.

WHY LOCAL PRICING SYSTEMS MATTER?

A local system for commodity price discovery is more closely aligned with domestic realities, regulations, government policies, seasonality, and local market events. As a result, such systems often provide businesses with more relevant and actionable price signals.

A local pricing system offers several advantages:

1. Truly local

While international benchmarks are

driven by global demand and supply conditions, country-specific fundamentals are often diluted in the aggregation process. Local pricing systems help bridge this gap.

For example, metal prices on MCX and SHFE periodically diverge from LME prices in order to reflect domestic market conditions. Such divergences provide valuable signals regarding the state of the local industry and can create business opportunities for domestic market participants.

2. Encourages trade flows

Periodic divergences between domestic and international prices create opportunities for imports & exports to rebalance shortages and surpluses. This improves market efficiency and enhances industrial competitiveness over time.

3. Convenience and access

Local currency-denominated pricing systems offer practical advantages to domestic businesses, particularly small and medium enterprises that primarily operate within the local market. The ability to transact and hedge in local currency also makes risk management more accessible and efficient.

4. Improved market transparency

Well-functioning domestic pricing systems improve transparency across the value chain. Transparent prices reduce information asymmetry and help market participants compete more fairly and efficiently.

DETERMINANTS OF LOCAL PRICING SYSTEMS

The existence and robustness of a local pricing system in any country are determined by several factors.

1. Domestic metal balance

Generally, commodities with high import dependency are more likely to use global benchmarks for "shadow pricing" in local transactions.

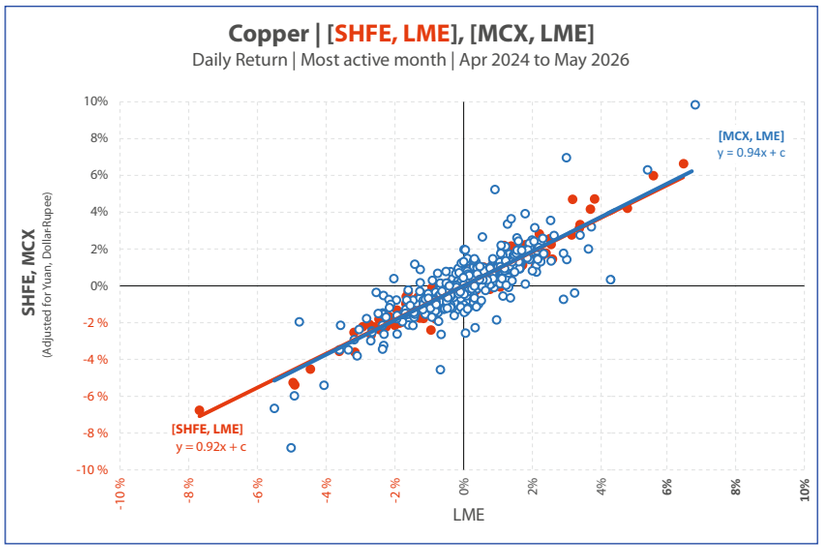

Figure 1: Relationship between daily changes in SHFE and LME Copper (Red) Vs those between MCX and LME Copper (Blue)

As shown in Figure 1, local copper prices on SHFE and MCX maintain a strong relationship with the global benchmark, the LME, as represented by coefficient of 0.92 and 0.94 with LME prices (1.00 = 100% correlation). This is primarily because both China and India depend significantly on imported copper.

In contrast, commodities with a net surplus are likely to exhibit a weaker linkage with global benchmarks and a stronger alignment with domestic fundamentals.

As illustrated in Figure 2, MCX aluminium exhibits a weaker relationship with LME prices (coefficient of 0.75) when compared to MCX copper (coefficient of 0.94); 1.00 represents 100% correlation. This can be explained by the fact that India exports approximately 25% of its primary aluminium output while importing around 44% of its copper requirements. Consequently, domestic factors exert greater influence on aluminium prices than on copper prices.

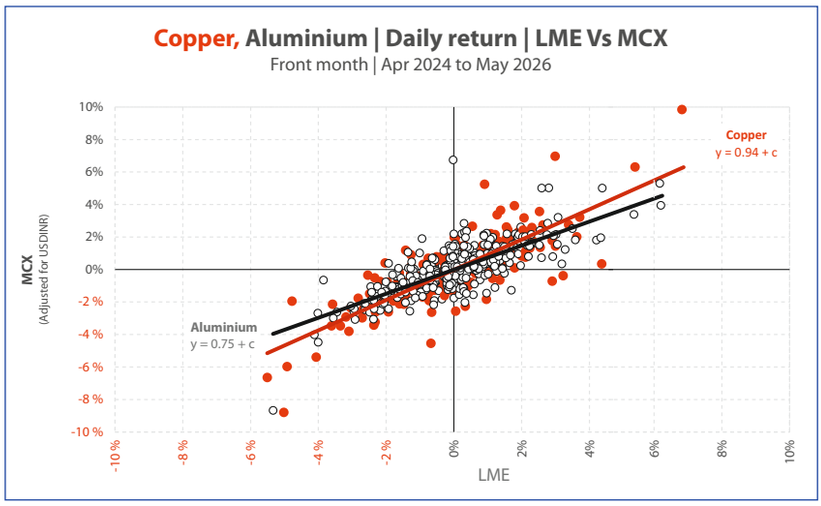

Figure 2: Relationship between daily changes in MCX and LME Copper (Red) Vs those between MCX and LME Aluminium (Black)

2. Tariff structure

By acting as a cushion between local and international prices, tariffs and non-tariff barriers reduce the transmission of performance of global benchmarks into domestic markets. This strengthens the role of local pricing systems in domestic transactions.

Commodities subject to export tariffs, export restrictions, or other trade barriers tend to align more closely with domestic fundamentals. China's experience provides a useful example.

China's self-sufficiency in aluminium production has weakened the relationship between its domestic prices and the LME benchmark, as illustrated in Figure 3

Moreover, the existence of a 15% export tariff on refined aluminium further reduces the influence of global benchmark prices on Chinese local prices.

The Figure 4 shows MCX aluminium exhibiting higher dependence on LME when compared to SHFE aluminium's dependence on the global benchmark. MCX aluminium displays a coefficient of 0.75 with changes in LME prices as against SHFE aluminium's 0.58, highlighting the stronger role of domestic factors in Chinese aluminium price discovery, helped by tariff structure.

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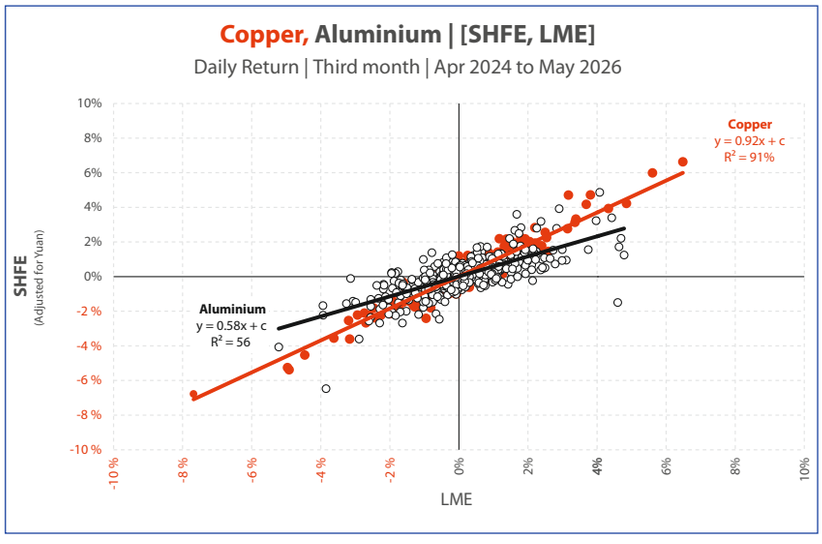

Figure 3: Relationship between daily changes in SHFE and LME Copper (Red) Vs those in SHFE and LME Aluminium (Black)

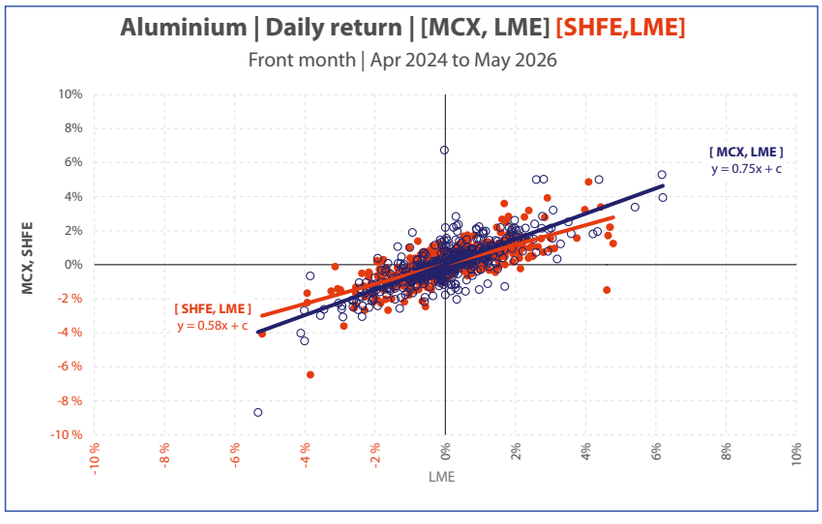

Figure 4: Relationship between daily changes in SHFE and LME Aluminium (Red) Vs those between MCX and LME Aluminium (Blue)

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3. Breadth and depth

Local pricing systems evolve over time as participation expands across the value chain and market depth increases. Indian gold prices are one of the best examples of this process.

India is among the world's largest consumers and importers of gold. Beyond importing, physical trading, value-added manufacturing & retail consumption, gold has developed a comprehensive ecosystem en-compassing recycling, financing through gold loans, investment products such as ETFs, as well as participation from banks, traders, jewellers, refiners, and retail investors.

The presence of multiple stakeholders generates continuous price discovery and trading activity. Broad participation improves market liquidity, enhances confidence in domestic pricing, and supports the development of a robust local pricing system.

Although Indian gold prices remain influenced by international benchmarks, domestic demand patterns, seasonal consumption, investment flows, and recycling activity play a significant role in local price discovery.

Metal	Global Benchmark Exists	Local Exists Pricing	Local Benchmark	Global Dominance
Gold/Silver	✓	✓	✓	✓
Steel Primary	✗	✓	✗	✓
Metals	✓	✓	✓	✗
Secondary Metals	✗	✓	✗	✗

(**Table 1:** Global and local pricing structures across commodity groups)

4. Existence of a secondary market

The presence of a strong recycling ecosystem enhances the development and significance of local pricing systems. Lead provides one of the best examples.

India is among the world's largest recyclers of lead. The country has eight brands registered for delivery into LME warehouses, the highest for any metal. Notably, approximately 72% of LME lead inventories originate from Indian recyclers. These figures highlight the dominance and importance of India's lead recycling industry.

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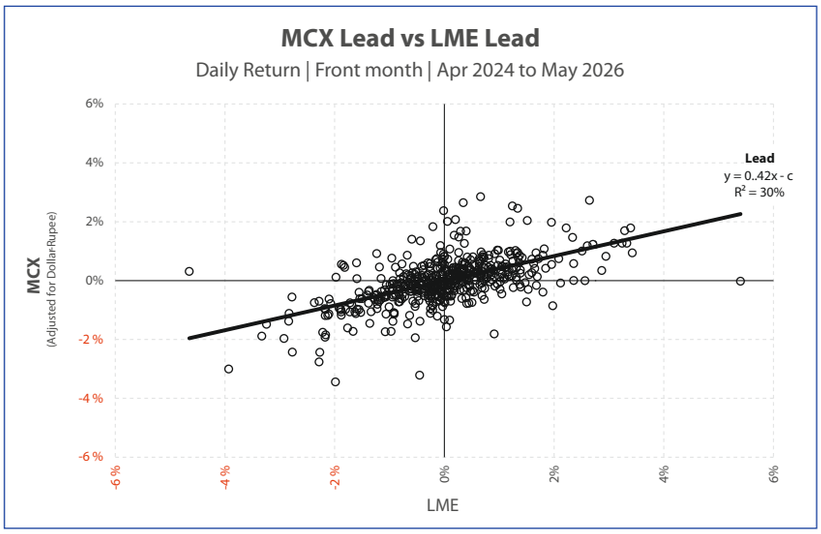

Figure 5: Relationship between daily changes in MCX and LME Lead

As shown in Figure 5, MCX lead prices exhibit a very weak relationship with the LME, with coefficient of 0.42 with LME price and R-squared value of just 30%, the lowest among all base metals.

Viewed differently, this displays the strength of India's well-established recycled lead market, where domestic demand, scrap availability, battery demand, and recycling economics play a much greater role in price discovery than international benchmark movements.

5. Existence of a local benchmark

A credible local benchmark is a key pillar of any successful domestic pricing system. It provides a transparent, unbiased, and market-determined reference price that can be used for trading, hedging, settlements, and commercial contracts.

In India, the Multi Commodity Exchange of India (MCX) has played a significant role in developing domestic benchmark prices across industrial commodities. Through transparent exchange-based trading, MCX offers rupee-denominated price discovery that reflects both international market developments and domestic factors such as currency movements, duties, taxes, and local demand-supply conditions.

Over the years, MCX contracts have gained acceptance among producers, consumers, traders, importers, exporters, and financial participants. Its delivery mechanism has helped strengthen convergence between futures and physical markets.

As a result, MCX prices for base and precious metals have gained increasing acceptance within the domestic industry and are widely used in commercial transactions.

WHERE DOES INDIA STAND?

1. Maturing steadily

India's commodity pricing system is undergoing a gradual evolution. While it remains anchored to global benchmarks, the influence of local factors is becoming increasingly visible in domestic price discovery.

As shown in Figure 6, the correlation between prices on MCX and the LME has gradually declined over the past year for all base metals. This points at local market dynamics becoming increasingly important in domestic price discovery.

The growing role of local factors in Indian metal pricing is further reflected in the rise in base metal inventories at MCX-registered warehouses from 6,467 MT in April 2025 to 23,733 MT in May 2026.

Among metals, copper exhibits the strongest linkage with LME prices due to India's import dependency. In contrast, India's strong domestic recycling ecosystem marks lowest correlation with the international benchmark for lead.

Irrespective of this, the trend suggests that while global benchmarks remain influential, domestic factors are gradually playing a larger role in determining local prices.

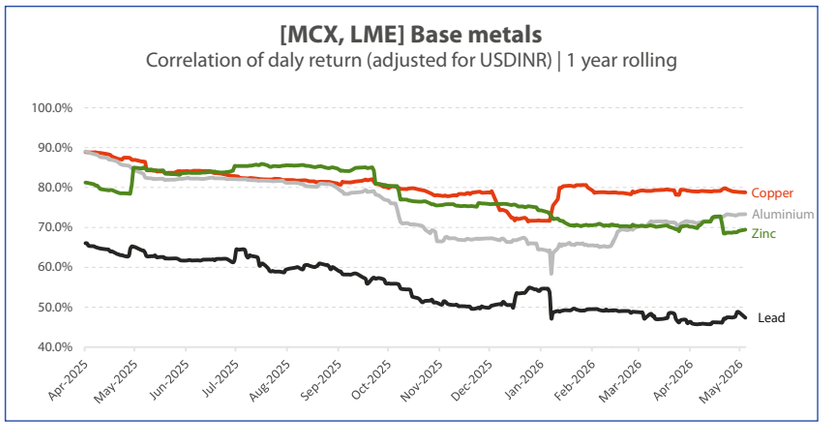

Figure 6: MCX-LME rolling correlation in base metals

2. Relatively higher volatility

Annualised Implied Volatility
May 2024 to May 2026

	Copper	Aluminium	Zinc	Lead
MCX	25%	21%	22%	14%
SHFE	20%	16%	18%	13%
LME	21%	22%	24%	18%
CME	35%			

Calculated on daily returns of the most active contracts after adjustment of currency movements.

Table 2: Annualised implied volatility across commodity exchanges

By design, local price benchmarks are generally less volatile than international benchmarks because they are more closely aligned with physical market fundamentals and are exposed to lower levels of speculative participation.

As shown in Table 2, SHFE's base metal contracts exhibit lower implied volatility than international benchmarks such as the LME and CME. However, MCX contracts present a more mixed picture.

This can partly be explained by relatively lower market depth and liquidity in certain MCX contracts. Also, higher speculative participation in copper, when compared to other base metals, explains its relatively higher volatility.

International experiences suggest that as market participation broadens and liquidity improves, domestic benchmarks exhibit lesser volatility when compared to international benchmarks.

WHAT TO EXPECT?

Global linkages are inevitable

Local prices of commodities, e.g. base metals, that are actively imported and exported, generally remain linked to global benchmarks. As a result, price movements in one region inevitably influence prices elsewhere through arbitrage, trade flows, and shifting demand-supply dynamics.

Correlation of Daily Return
MCX vs LME | SHFE vs

	Copper	Aluminium	Zinc	Lead
SHFE	93%	76%	84%	68%
MCX	81%	78%	74%	54%
CME	74%	—	—	—

May 2024 to May 2026

Table 3: Correlation between daily return of MCX, SHFE and CME prices w.r.t. their metals' respective LME contracts

As shown in Table 3, even highly developed local pricing systems such as SHFE continue to maintain meaningful correlations with global benchmarks.

Therefore, the strength of a local pricing system should not be measured by its ability to disconnect from global markets. Rather, its robustness lies in its ability to reflect domestic fundamentals while remaining integrated with the broader global pricing system.

PRICE MAKER: AN EVOLUTION PROCESS

Empirical evidence suggests that during the early stages of economic development, most countries remain price-takers due to the small size of their domestic markets and an efficient, read-to-use reference provided by global benchmarks. However, as industrial activity expands, domestic consumption rises, and financial markets deepen, local pricing systems gradually gain importance.

In other words, becoming a commodity price maker or price influencer is typically the outcome of long-term economic evolution, industrial growth, market development, and increasing global relevance. The influence and acceptance of local benchmarks develop gradually as a nation gains meaningful participation in global production, consumption, processing, trade, or inventories of a commodity.

Over time, economies begin influencing global prices through the sheer scale of their production, consumption, and trading activity. This influence often emerges even before their domestic exchanges attain international dominance.

China offers one of the clearest examples of this evolution. Its influence on global commodity prices did not emerge solely through the development of SHFE, but through decades of industrial expansion, infrastructure growth, rising consumption, and increasing participation in global trade.

India is now moving along a similar path. As its manufacturing base expands, infrastructure spending increases, and commodity

consumption rises, the role of domestic pricing systems is likely to strengthen further.

CONCLUSION

India is witnessing a gradual but meaningful localisation of commodity prices. The process is likely to accelerate over the coming months and years. Government policies that support domestic manufacturing, encourage value addition, strengthen recycling industries, and deepen financial markets will play an important role in this transition.

While the role of domestic factors may rise in determining local prices over time, a complete or significant detachment from global benchmarks is unlikely especially for commodities of international trade.

The journey from price-taker to price influencer is evolutionary rather than revolutionary. India has already begun that journey.

Bibliography

- ***Metal Intelligence Centre (MIC):*** Internal analysis based on historical price data, correlation studies, implied volatility calculations, import dependency assessment, recycling industry analysis, and commodity market structure evaluation.
- ***London Metal Exchange (LME):*** Official market data, warehouse stocks and metals pricing information.
- ***Shanghai Futures Exchange (SHFE):*** Daily futures prices, inventory data and market statistics.
- ***Multi Commodity Exchange of India (MCX):*** Commodity futures prices, contract specifications and market statistics.
- ***Chicago Mercantile Exchange (CME):*** Commodity market data and futures pricing information.
- ***Ministry of Commerce and Industry:*** Foreign trade statistics, import and export data.
- ***Metal prices made in China? A network analysis of industrial metal future (May 2022)*** by Pierre L. Siklos, Martin Stefan and Claudia Wellenreuther.
- ***Revisiting price linkages between London and Shanghai base metal futures markets:*** A time-frequency connectedness analysis (April 2026) by Cunhai Pan and Wei Shen.