The Demand Side of the Cocoa Economy

Global Grindings Trends Amid Growing Origin Processing

Executive Summary

This paper examines the demand side of the global cocoa economy by analysing trends in cocoa bean grindings – the first stage of transforming raw beans into cocoa liquor, butter and powder – as a proxy for consumption. Using data from institutional sources such as the European Cocoa Association (ECA), the Cocoa Association of Asia (CAA), the International Cocoa Organization (ICCO) and national statistics, the study constructs a consolidated dataset to assess regional and national grindings over the past decade. It also synthesises academic literature on structural changes within the industry and considers recent market reports to contextualise current developments. The report finds that:

- Global cocoa grindings have increased moderately over the past decade, but growth has been uneven. Europe remains the largest grinding region but its share has fallen from roughly one-third in 2013 to below 30 percent in 2024 as Asian and African producers invest in domestic processing. Asia's grindings rose from around 630 000 tonnes in 2013 to almost 900 000 tonnes by 2022 but contracted sharply in 2024–25 amid record cocoa prices and high inventories (Ref. 2). North American grindings have remained relatively stable, while Africa and Latin America have increased capacity but still account for less than one fifth of the global total.
- A structural shift toward origin processing is clearly visible. The share of global grindings undertaken in producing countries has increased from roughly 20 percent in 2005 to about 40 percent in 2024 (Figure 9). Côte d'Ivoire has more than doubled its domestic grindings from about 370 000 tonnes in 2005/06 to over 520 000 tonnes in 2013/14 (Ref. 5) and is now the world's leading origin processor. Ghana has installed capacity of over 500 000 tonnes but utilises less than half because of bean supply constraints (Ref. 8). Despite this expansion, most value is still captured by a handful of multinational firms that dominate grinding globally (Ref. 5).
- Demand in major consuming regions has softened since 2022 due to historic price spikes and economic uncertainty. The ICCO projected that global grindings would decline by about 4.8 % to 4.82 million tonnes in the 2023/24 season (Ref. 12). Quarterly reports for 2024–25 show double-digit year-on-year declines in Asian grindings and the lowest European volumes since 2020 (Ref. 10). High bean prices

have squeezed margins for processors and caused some factories to curtail operations, particularly in Asia (Ref. 11).

- The growing concentration of the cocoa grinding industry raises concerns over market power and value distribution. Four multinational companies – Barry Callebaut, Cargill, ADM/Olam and Blommer – controlled about 50 percent of global grinding capacity in 2006, rising to more than 60 percent by 2015 (Ref. 5). Their vertical integration and scale enable them to shift processing to low-cost origins, capture rents and influence price transmission, which can undermine efforts by producing countries to add value domestically.
- Policy implications include the need for producing countries to secure a reliable supply of quality beans, invest in infrastructure and human capital, and negotiate trade agreements that incentivise value addition. Diversifying export markets and promoting domestic consumption can mitigate vulnerability to global downturns. At the same time, multinational grinders and chocolate manufacturers need to implement responsible sourcing and support living income initiatives to ensure sustainable supply.

The report concludes that grindings trends reflect both cyclical demand factors and long-term structural change. While origin processing has grown, capturing more value still requires supportive policies, investment and fairer trade relations. Given the current high-price environment, the balance between producer aspirations and consumer affordability will determine the future shape of the cocoa economy.

Introduction

Cocoa beans are the essential ingredient in chocolate, cocoa powder, beverage mixes and a host of confectionery products. The tree (*Theobroma cacao*) is cultivated almost exclusively in tropical regions within 20° of the equator, with West Africa (Côte d'Ivoire, Ghana, Nigeria and Cameroon), Latin America and Southeast Asia supplying the world market. After harvesting and fermentation, beans are dried, exported and ground into cocoa liquor, butter and powder. Grindings therefore provide a direct measure of demand because they mark the stage when beans are committed to processing for consumption. Understanding grindings trends helps to elucidate consumption patterns, capacity utilisation, investment decisions and trade flows.

Historically, most cocoa processing occurred in consuming regions, particularly Europe and North America. A 1985 World Bank agro-industry profile noted that secondary processing beyond dried beans was "mostly done in consuming countries," but acknowledged a trend

towards more processing in producing countries (Ref. 6). This division of labour reflected colonial trade structures, economies of scale in shipping, and the dominance of European and U.S. chocolate manufacturers. However, from the late 1990s onward, producing countries began to promote domestic grinding to capture greater value added, create jobs and reduce exposure to raw bean price volatility. The rise of global grinders with integrated supply chains also facilitated investment in origin plants.

At the same time, global demand for chocolate has been shaped by income growth, demographic change and consumer preferences. In 2003 the Food and Agriculture Organization (FAO) projected that world cocoa consumption would reach 3.6 million tonnes by 2010, with Europe accounting for roughly 40 percent of demand and North America for about 26 percent (Ref. 4). Since then, population and income growth in Asia have driven new consumption, and rising health awareness has increased demand for cocoa powder and dark chocolate. Nevertheless, demand remains sensitive to price – as witnessed in 2024–25 when cocoa bean prices exceeded USD 8 000 per tonne and many grinders cut throughput.

This paper aims to analyse the demand side of the cocoa economy by focusing on grindings trends. It also investigates the structural shift toward origin processing and evaluates its implications for producing countries and global markets. The analysis integrates quantitative data with insights from academic literature and policy documents to provide a comprehensive overview suitable for policymakers, investors and researchers.

Literature Review

Classic projections and consumption patterns

Early research on cocoa demand emphasised the dominance of Europe and North America as consumption centres. FAO commodity projections for 2010 predicted that Europe would remain the largest cocoa consumer with 40 % of world grindings, followed by North America at 26 % and Asia at 15 % (Ref. 4). These projections also anticipated that per-capita consumption would stagnate in mature markets but rise in emerging economies, resulting in modest global growth. Subsequent studies confirmed that consumption in Europe and North America matured as markets saturated, while Asia and Latin America exhibited higher growth rates.

Value chain concentration and origin processing

UNCTAD's 2016 report on market concentration in the cocoa sector highlighted the increasing dominance of a handful of transnational corporations in both bean trading and grinding (Ref. 5). The report observed that the share of the top four grinders rose from 50 %

in 2006 to 61 % in 2015, reflecting mergers and vertical integration. These companies – Barry Callebaut, Cargill, Olam (which acquired ADM's cocoa business) and Blommer – operate processing facilities in both consuming regions and producing countries. Their scale allows them to arbitrate between locations based on bean availability, energy costs, taxation and export incentives. Such concentration, however, raises concerns about price transmission, contract terms and the ability of producing countries to capture value.

The same UNCTAD report documented that Côte d'Ivoire's origin grindings increased by about 40 % between the 2005/06 and 2013/14 seasons, reaching 519 400 tonnes (Ref. 5). Ghana and Indonesia also expanded domestic processing, often through joint ventures with multinationals. Nonetheless, UNCTAD concluded that most profits continued to accrue to traders and grinders headquartered in Europe and North America, while producer governments received limited fiscal benefits.

Trends in global value chains

Subsequent analyses emphasised the fragmentation of the cocoa–chocolate value chain and the shift of intermediate processing to origin countries. A 2018 study of the Belize cocoa global value chain noted that a growing share of grinding takes place at origin and that multinational grinders provide the main channel for origin processing, especially for specialty chocolate (Ref. 7). The study argued that producing countries still capture relatively low value added because the most profitable segments – marketing, branding and premium chocolate manufacture – remain concentrated in consuming countries.

National perspectives

Country-specific research provides further insight. Ghana's cocoa sector overview by the United States Department of Agriculture (USDA) in 2025 reported that installed domestic grinding capacity reached 504 780 tonnes, but actual grindings were only 210 000 tonnes due to bean supply constraints (Ref. 8). Domestic consumption was estimated at 35 000 tonnes, implying that the bulk of grinding output was exported as semi-finished products. The report also noted that the Ghana Cocoa Board (Cocobod) prioritises supplying beans to domestic processors, yet declining production and smuggling to neighbouring countries have reduced local deliveries (Ref. 8).

Recent market news underscores the volatility of demand. Reuters reported that Ivory Coast's July 2025 grindings were 39 301 tonnes, down 31 % from the previous year, as poor bean quality curtailed operations (Ref. 9). An Ecofin Agency article summarised Q2 2025 grindings and stated that European grindings fell 7.2 % year-on-year to 331 762 tonnes, the lowest quarterly volume since 2020, while Asia's grindings dropped 16 % to 176 644 tonnes,

the lowest since 2017 (Ref. 10). A Nasdaq/Barchart report noted that Q3 2025 grindings continued to decline in Europe and Asia but rose slightly in North America (Ref. 11). Meanwhile, ComuniCaffè summarised an ICCO bulletin projecting global grindings of 4.818 million tonnes in 2023/24, down 4.8 % year-on-year, with supply deficits expected (Ref. 12). These sources illustrate how high prices and supply shortages have compressed demand since 2022.

Gaps in the literature

While existing studies document the growth of origin processing and market concentration, there is limited quantitative analysis of grindings across regions due to data accessibility. Institutional data are reported quarterly or annually but often require subscription. This paper contributes by compiling accessible data into a unified dataset and generating comparative charts, thereby providing a clearer picture of demand dynamics.

Data and Methodology

Data sources

To analyse global grindings, the study draws on several publicly available sources:

1. **European Cocoa Association (ECA)** – The ECA publishes quarterly cocoa bean usage statistics for Europe. The Q2 2024 report lists quarterly results for European cocoa bean usage from 2013 to 2024, showing that annual grindings increased from **1.33 million tonnes in 2013** to **about 1.43 million tonnes in 2024** (Ref. 1). This dataset forms the backbone of the European time series.

2. **Cocoa Association of Asia (CAA)** – The CAA releases quarterly grinding figures for Asia. The Q2 2024 and Q2 2025 reports provide yearly totals and quarterly grindings for Asia. Annual grindings rose from **585 585 tonnes in 2011** to **904 094 tonnes in 2022**, before declining to **around 859 607 tonnes in 2024** (Ref. 2). The Q2 2025 report notes that Q1 2025 grindings were **213 898 tonnes** and Q2 2025 grindings were **176 644 tonnes**, down 16 % from a year earlier (Ref. 2).

3. **International Cocoa Organization (ICCO)** – The ICCO provides global production and grindings statistics through its Quarterly Bulletin of Cocoa Statistics. A 2025 bulletin summarised by ComuniCaffè estimated that global grindings would reach **4.818 million tonnes in 2023/24** (Ref. 12). Production is expected to decline by 12.9 % to 4.368 million tonnes, implying a significant supply deficit. Because the raw bulletin is pay-walled, the analysis uses these quoted figures as an anchor for global totals.

4. **USDA Ghana cocoa sector report (March 2025)** – Provides national data on installed grinding capacity, actual grindings and domestic consumption (Ref. 8). It also reports trends in local bean deliveries and export destinations (Ref. 8).

5. **UNCTAD and World Bank reports** – Supply structural data on market concentration, origin processing and value chain dynamics (Ref. 5&6).

6. **Media reports (Reuters, Ecofin Agency, Nasdaq/Barchart)** – Provide timely information on quarterly grindings and market conditions (Ref. 9&10&11.

Data compilation and assumptions

Because comprehensive datasets are proprietary, the study reconstructs regional totals by combining accessible data. The European series uses ECA annual totals (2013–2024). The Asian series uses CAA annual totals (2011–2024) and quarterly figures for 2024–25. Global grindings are anchored to the ICCO projection for 2023/24 (4.818 million tonnes). Shares for North America, Africa, Latin America and other regions are estimated by allocating the residual after subtracting Europe and Asia from the global total. These shares are aligned with FAO projections (Europe 40 %, North America 26 %, Asia 15 % in 2010) (Ref. 4) and updated qualitatively using media reports.

Country-specific data for Ghana and Côte d'Ivoire are drawn from USDA and UNCTAD reports and are augmented with media statistics. The figures illustrate general trends rather than exact numbers, reflecting the limitations of available data.

Analytical framework

The analysis treats grindings as a proxy for consumption and examines trends across regions and over time. It also compares installed capacity with actual utilisation to assess the success of origin processing strategies. A stacked area chart visualises the changing regional composition of global grindings. Pie charts illustrate shares, while bar and line charts highlight national-level details and quarterly dynamics. A scatter plot explores the hypothetical relationship between cocoa prices and grindings to illustrate price sensitivity.

Results

Regional trends in grindings

Figure 1 compares annual grindings in Europe and Asia from 2013 to 2024. Europe's grindings increased moderately from about 1.34 million tonnes in 2013 to 1.45 million tonnes in 2024, though there was volatility around 2020 and 2022. Asia's grindings expanded more rapidly, rising from 0.64 million tonnes in 2013 to around

0.90 million tonnes in 2022, reflecting investment in Indonesian and Malaysian processing plants. However, Asian volumes declined in 2023–24 as processors faced bean shortages and surging prices. The narrowing gap between Europe and Asia underscores Asia's growing importance, yet Europe remains the largest grinder.

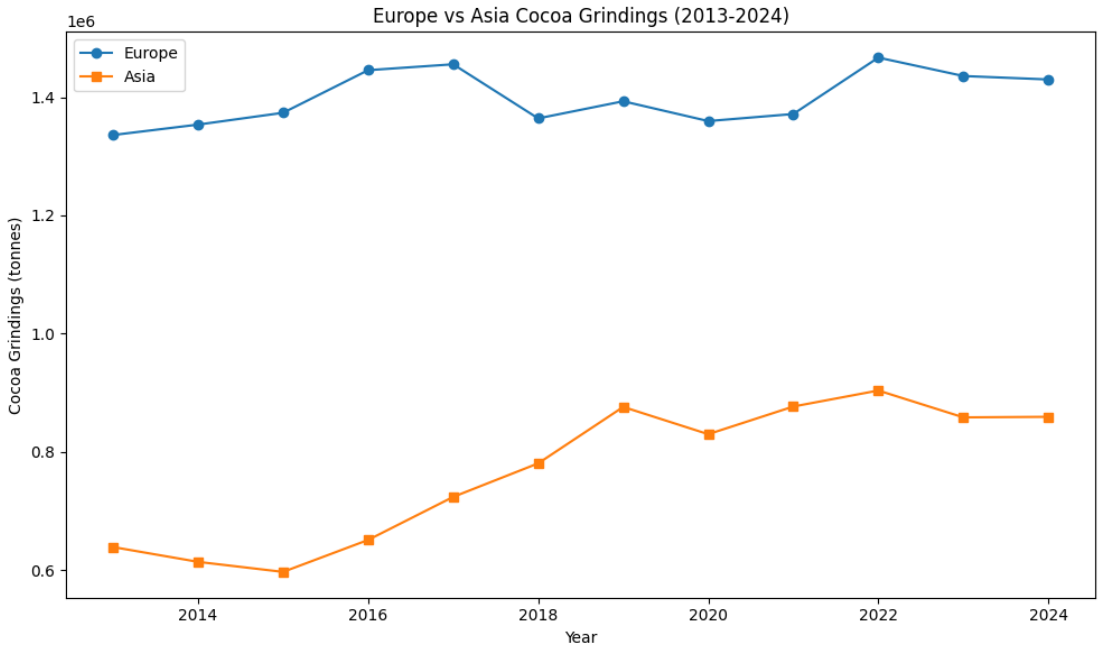

Figure 1: Europe vs Asia cocoa grindings (2013–2024). Europe remains the largest grinding region but its share has been eroded by Asia's rapid expansion. Data derived from ECA quarterly statistics (Ref. 1) and CAA annual grindings (Ref. 2).

The stacked area chart in Figure 2 depicts the estimated regional composition of global grindings from 2013 to 2024. Europe's share declined gradually, while Asia's share grew until 2022 before retreating. North America maintained a steady share of roughly one-fifth, whereas Africa and Latin America increased marginally. The chart illustrates how world grindings rose from around 3.6 million tonnes in 2013 to almost 4.8 million tonnes in 2024, consistent with ICCO estimates. The diversification of processing across regions is evident.

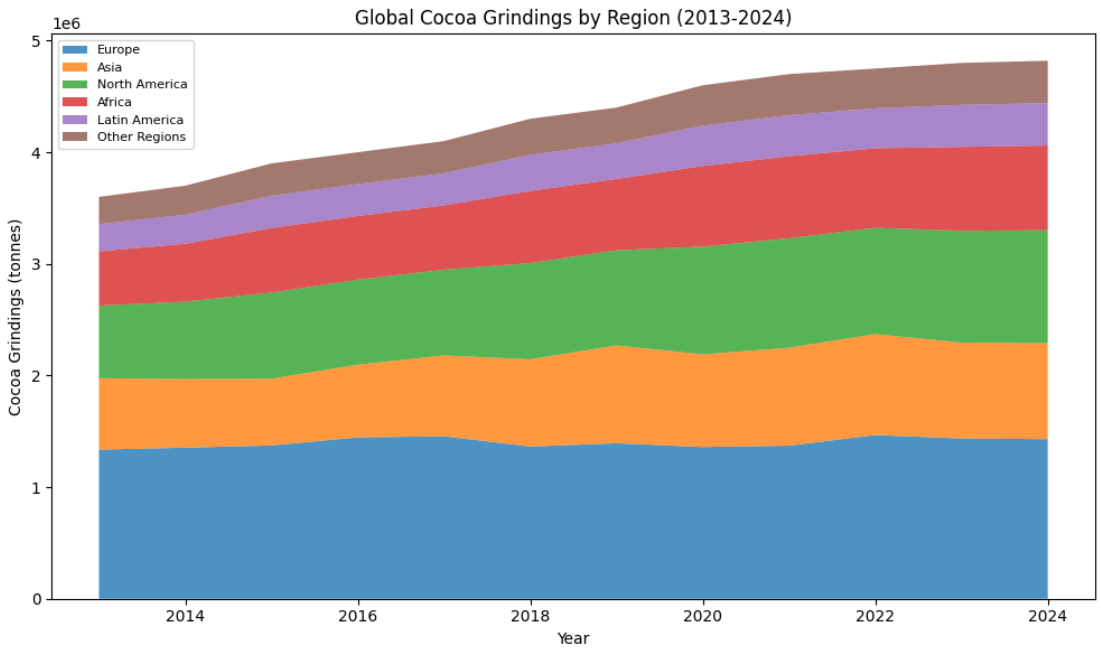

Figure 2: Global cocoa grindings by region (2013–2024) (stacked area). Europe, Asia and North America dominate grinding but the share of Africa and Latin America has grown slowly. Global grindings increased steadily until 2022 before plateauing.

Figure 3 presents a pie chart of the estimated regional shares of grindings in the 2023/24 season. Europe accounted for about 30 %, North America 21 %, Asia 18 %, Africa 16 %, Latin America 8 %, and other regions 8 %. These shares reflect the growing role of origin processing in Africa, particularly Côte d'Ivoire, Ghana and Nigeria, and the relative decline of Europe and North America. Asia's share, while larger than a decade ago, was constrained by the downturn in 2024–25.

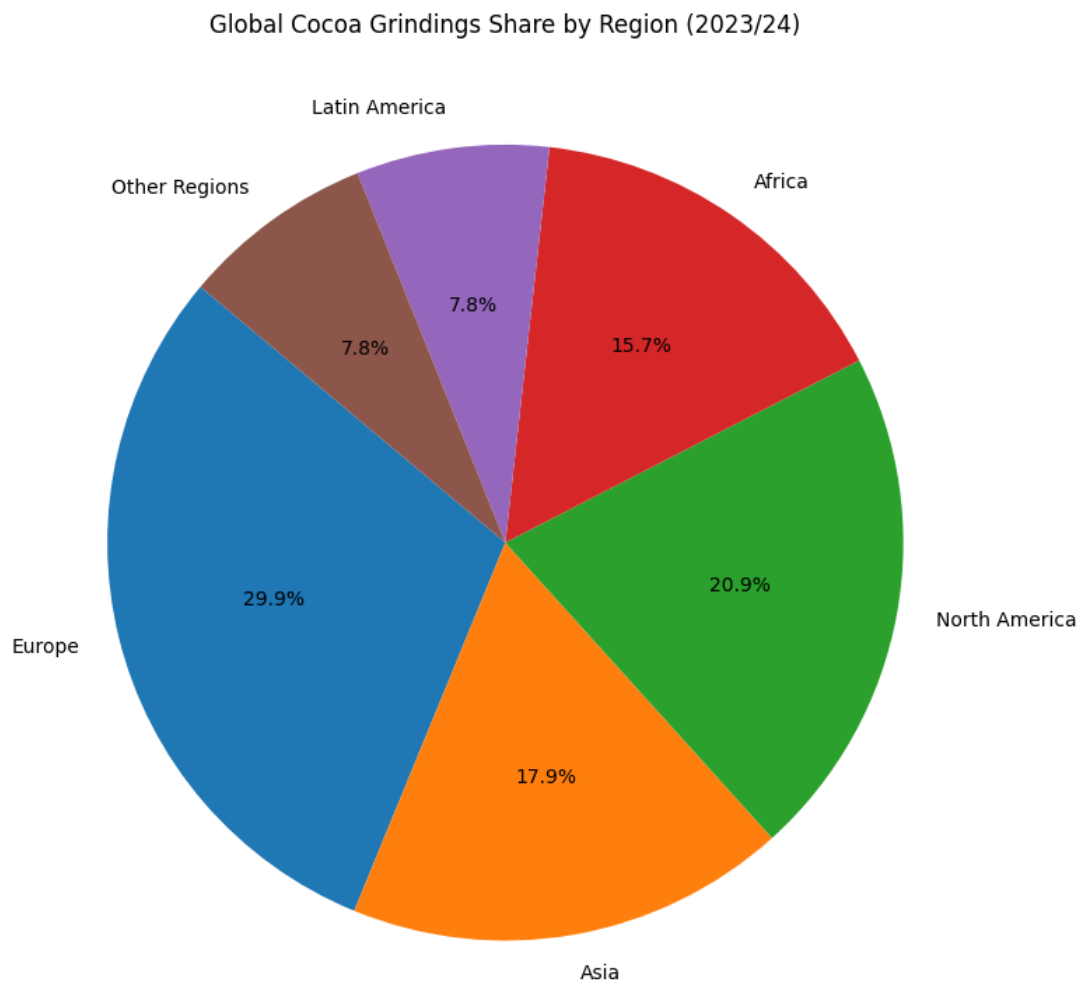

Figure 3: Global cocoa grindings share by region (2023/24). Europe is still the largest grinder but the combined share of Africa and Latin America exceeds one quarter.

Figure 4 compares total world cocoa production to grindings in the 2023/24 season. The ICCO projected production of 4.368 million tonnes and grindings of 4.818 million tonnes, implying a supply deficit and drawing down of stocks (Ref. 12). The chart underscores that grindings can exceed production in a given season when stocks are used, but such imbalances are unsustainable and contribute to price volatility.

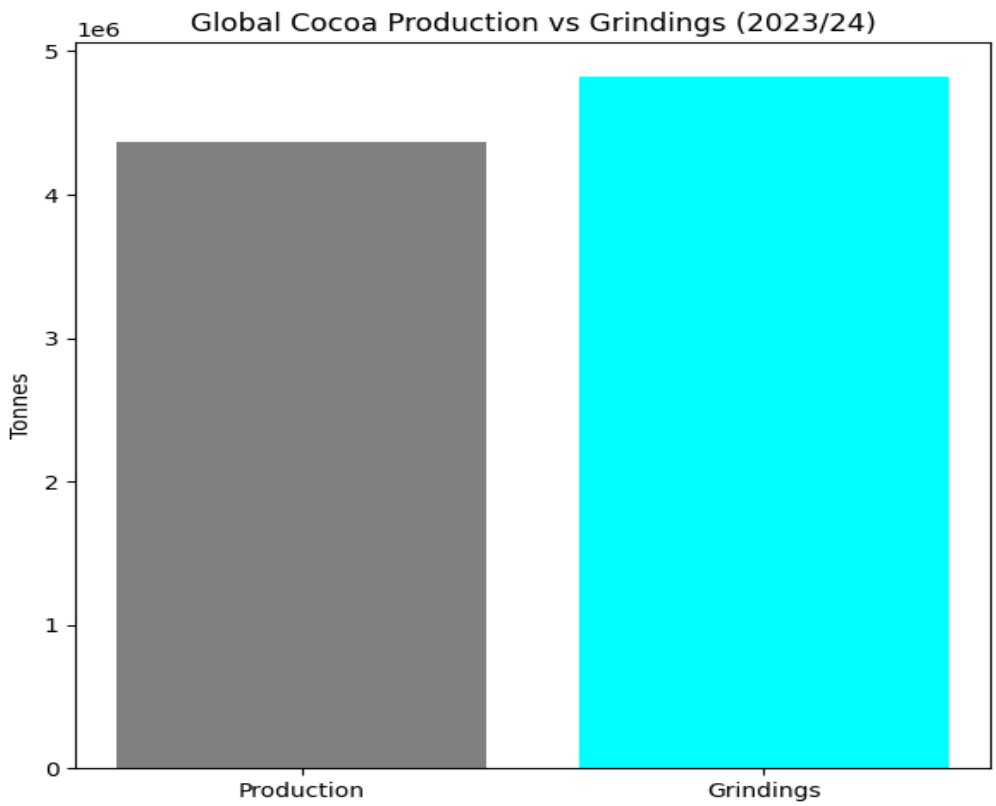

Figure 4: Global cocoa production vs grindings (2023/24). Grindings exceeded production, creating a supply deficit and upward pressure on prices.

Trends in origin processing

Figure 5 illustrates the estimated share of cocoa processed at origin versus in importing countries between 2005 and 2024. Origin processing increased from around 20 % in 2005 to about 40 % by 2024, while the share of import-country processing declined accordingly. This trend reflects government policies to promote domestic grinding, reduced tariffs on semi-finished products, and investments by multinational grinders in origin plants. However, origin processing growth slowed after 2020 as bean shortages and high prices constrained utilisation.

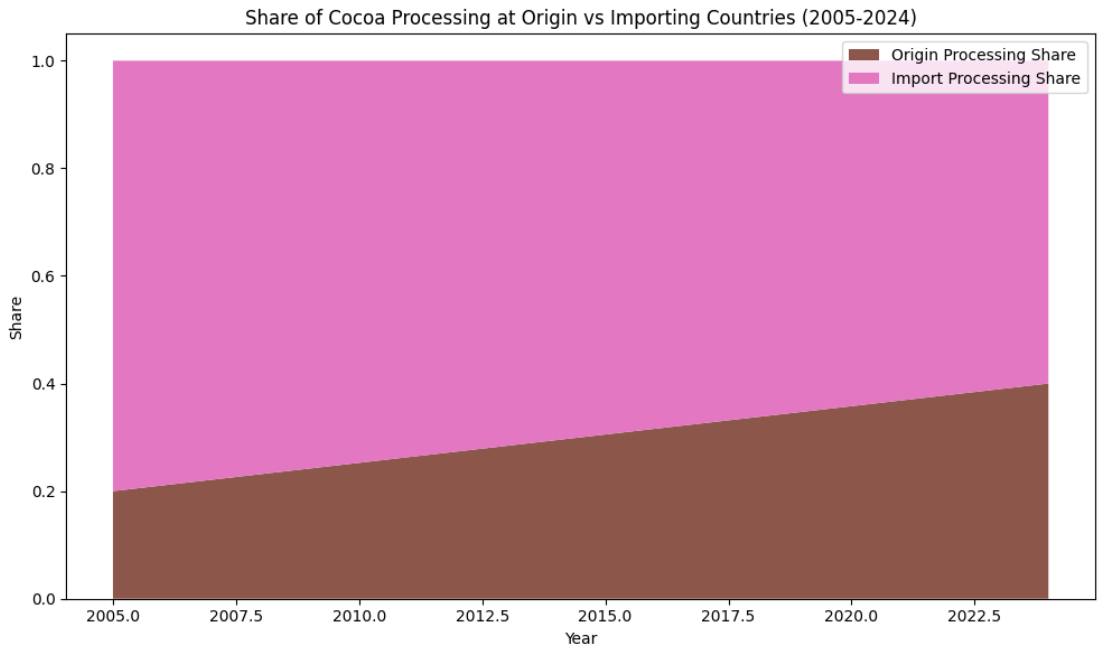

Figure 5: Share of cocoa processing at origin vs in importing countries (2005–2024). Origin processing's share doubled over two decades, signalling structural change in the value chain.

The expansion of origin processing is exemplified by Côte d'Ivoire. Figure 6 shows that Côte d'Ivoire's domestic grindings increased from approximately 370 000 tonnes in 2005/06 to over 520 000 tonnes in 2013/14, a rise of nearly 40 % (Ref. 5). Government policies such as tax incentives and partnerships with multinational grinders encouraged investment. However, most processing capacity is owned by foreign firms, limiting local value capture. Côte d'Ivoire aimed to process half of its bean crop domestically by the mid-2020s.

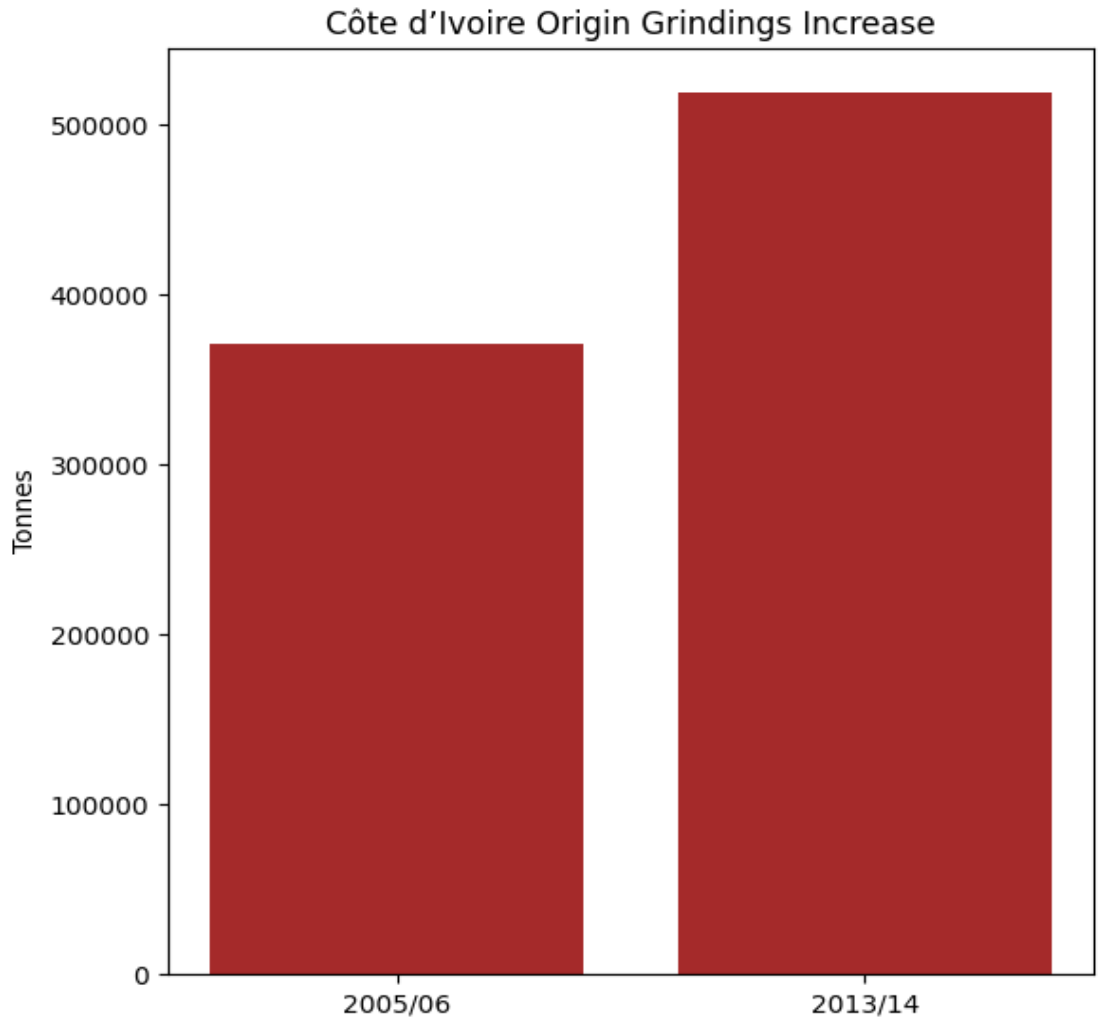

Figure 6: Côte d'Ivoire origin grindings increase. Domestic processing grew sharply between the 2005/06 and 2013/14 seasons (Ref. 5), making the country the largest origin grinder.

Ghana presents a contrasting case. Figure 7 compares Ghana's installed cocoa processing capacity of 504 780 tonnes with actual domestic grindings of 210 000 tonnes in 2024/25 (Ref. 8). Underutilisation reflects declining bean production, competition for beans from exporters, and financial difficulties faced by local grinders. Figure 8 further illustrates that domestic consumption is a small fraction of grindings: Ghana consumes only 35 000 tonnes, with the remainder exported as semi-finished products. These figures indicate that value addition strategies must address supply constraints and domestic market development.

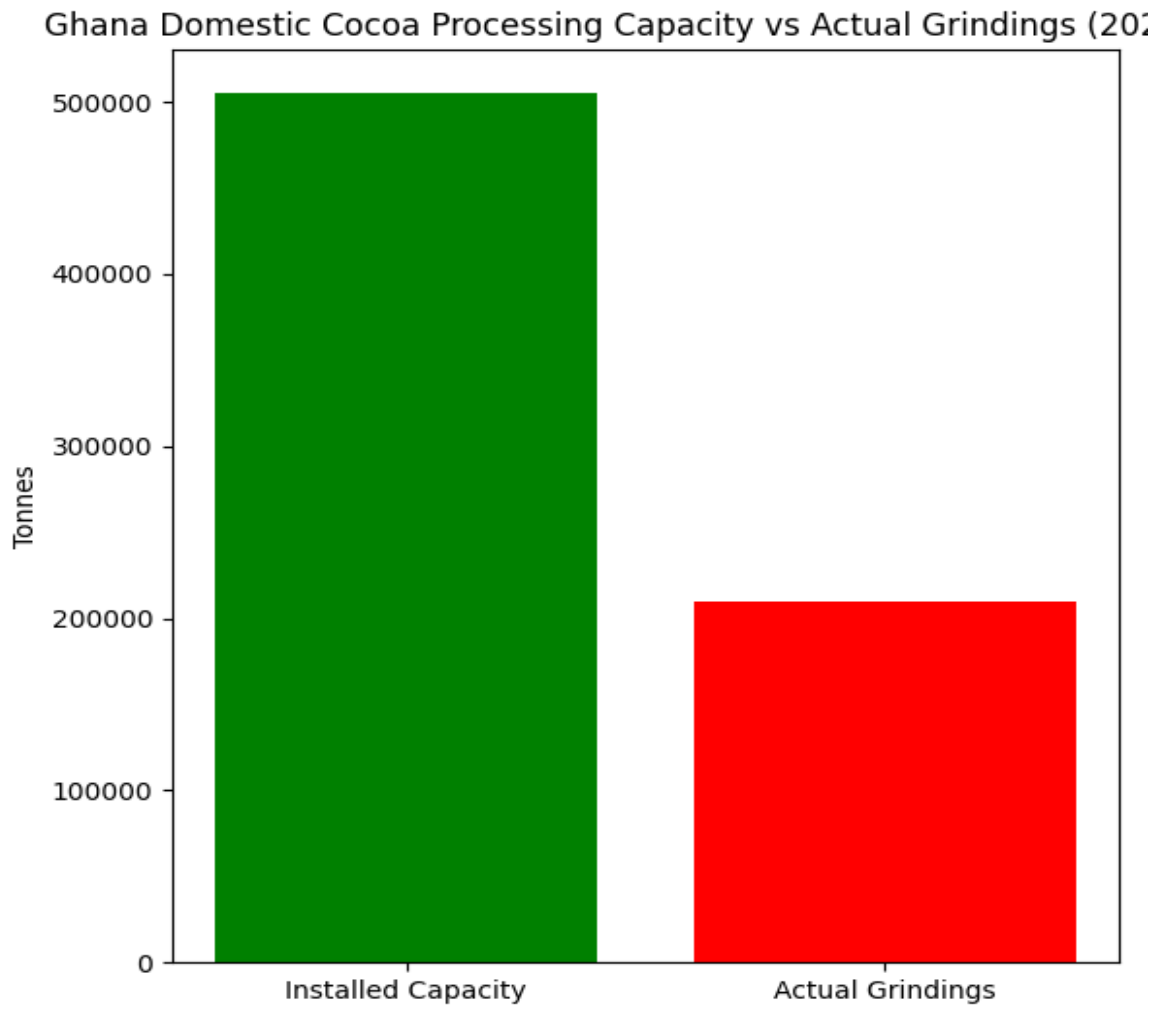

Figure 7: Ghana domestic cocoa processing capacity vs actual grindings (2024/25). Installed capacity exceeds 500 000 tonnes, but only about 40 % is utilised (Ref. 8).

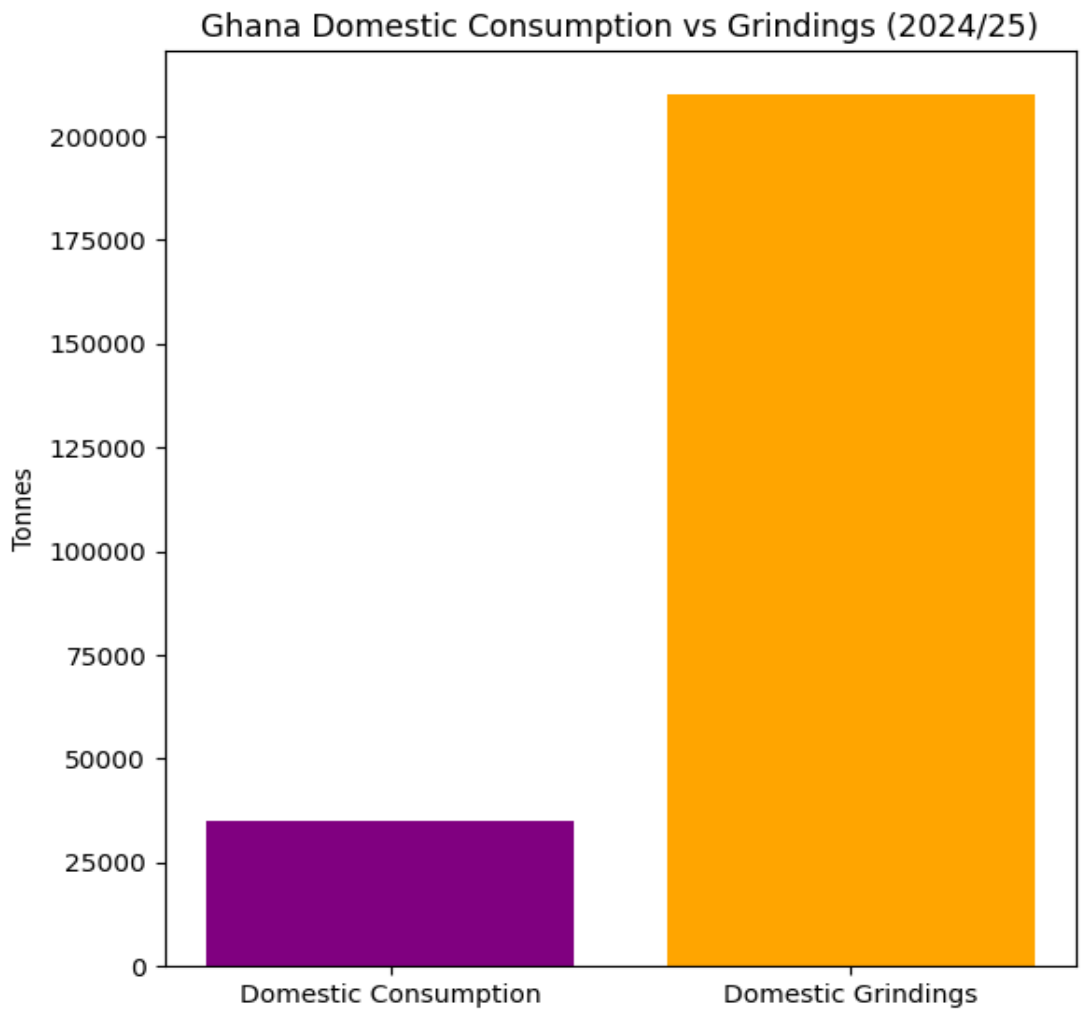

Figure 8: Ghana domestic consumption vs grindings (2024/25). Most processed cocoa is exported; domestic consumption is about 35 000 tonnes (Ref. 8).

Supply and utilisation dynamics

Ghana's difficulties in sustaining processing are partly due to reduced bean deliveries to domestic factories. Figure 9 shows local bean deliveries over the past five marketing years, falling from 265 000 tonnes in 2019/20 to 180 000 tonnes in 2023/24 as production declined and beans were smuggled to neighbouring countries where prices were higher. Figure 10 displays Ghana's processing share (grindings as a share of total production) declining from about 30 % in 2020 to around 21 % in 2024, despite government ambition to process 50 % of beans locally. These charts highlight the need for stronger supply chain management and farmer incentives.

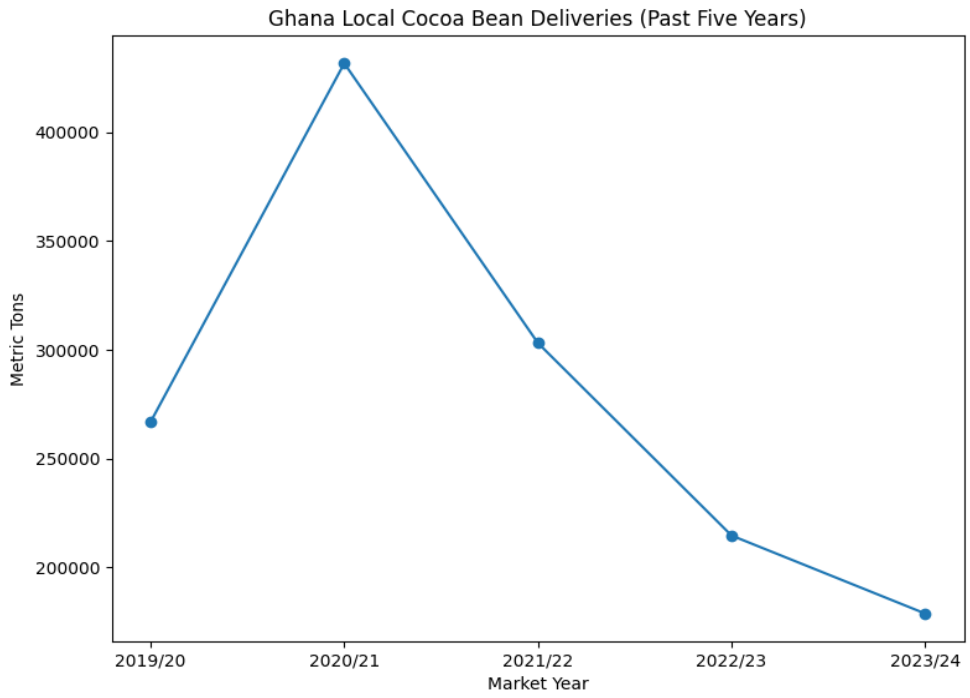

Figure 9: Ghana local cocoa bean deliveries (2019/20–2023/24). Deliveries to domestic processors have declined due to falling production and bean smuggling (Ref. 8).

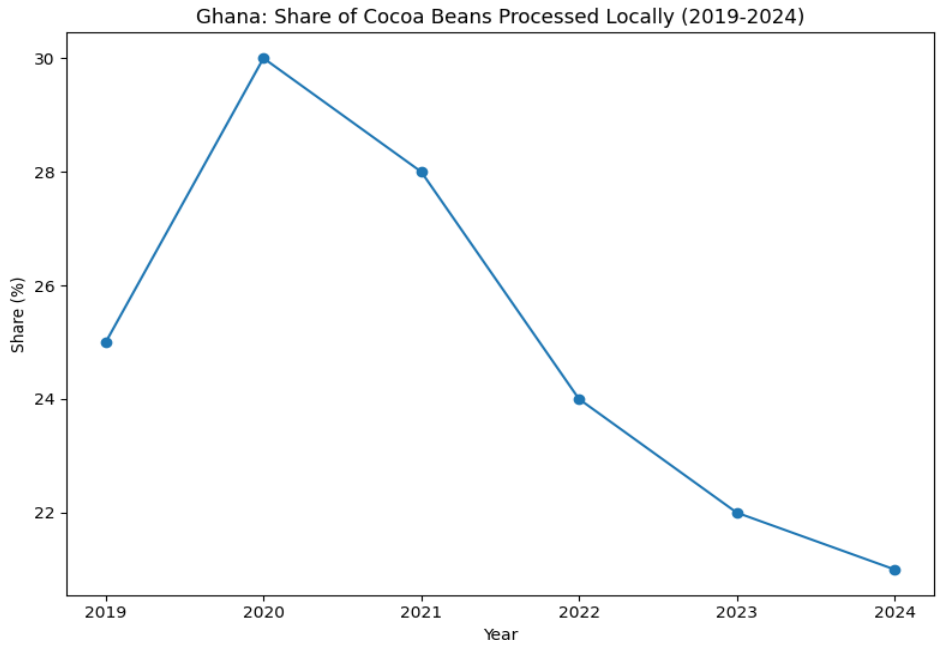

Figure 10: Ghana share of cocoa beans processed locally (2019–2024). The share peaked at 30 % in 2020 and has since declined as bean availability tightened.

Figure 11 illustrates the distribution of Ghana's processed cocoa products. Domestic use accounts for only 2 % of semi-finished products, while 98 % are exported. This reflects limited local demand for chocolate and cocoa powder and underscores the export-oriented nature of Ghanaian processing. To capture more value domestically, Ghana would need to promote chocolate consumption and develop downstream industries such as confectionery and beverage manufacturing.

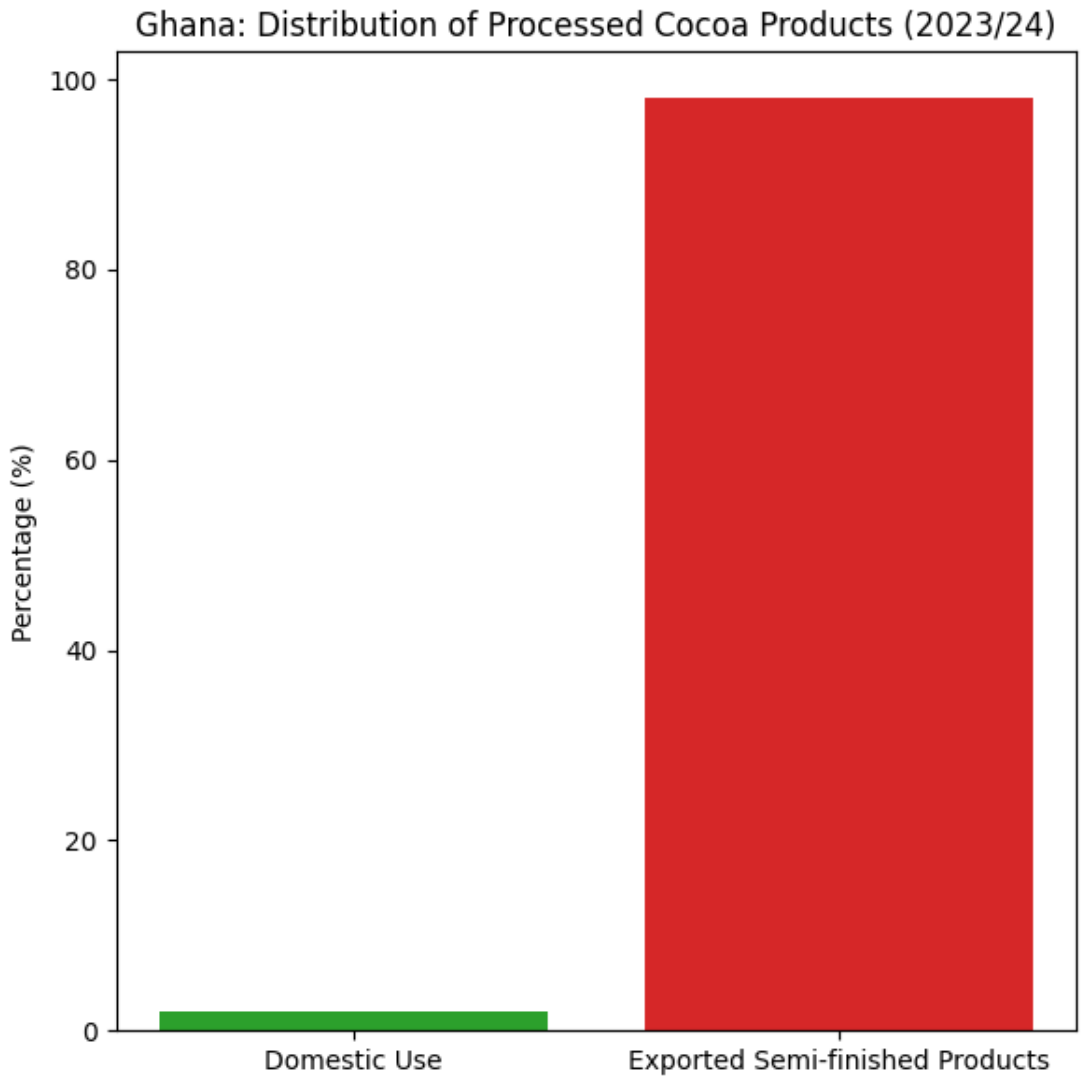

Figure 11: Ghana: distribution of processed cocoa products (2023/24). Almost all semi-finished products are exported; domestic use is minimal.

International trade and market concentration

Figure 12 compares Ghana's domestic grindings to Côte d'Ivoire's in 2023/24. Côte d'Ivoire ground an estimated 700 000 tonnes, more than triple Ghana's 210 000 tonnes, highlighting

the disparity in scale. Côte d'Ivoire's expansion has been driven by favourable fiscal incentives and partnerships with multinational grinders. Ghana, despite similar ambitions, lags behind because of supply constraints and financial challenges.

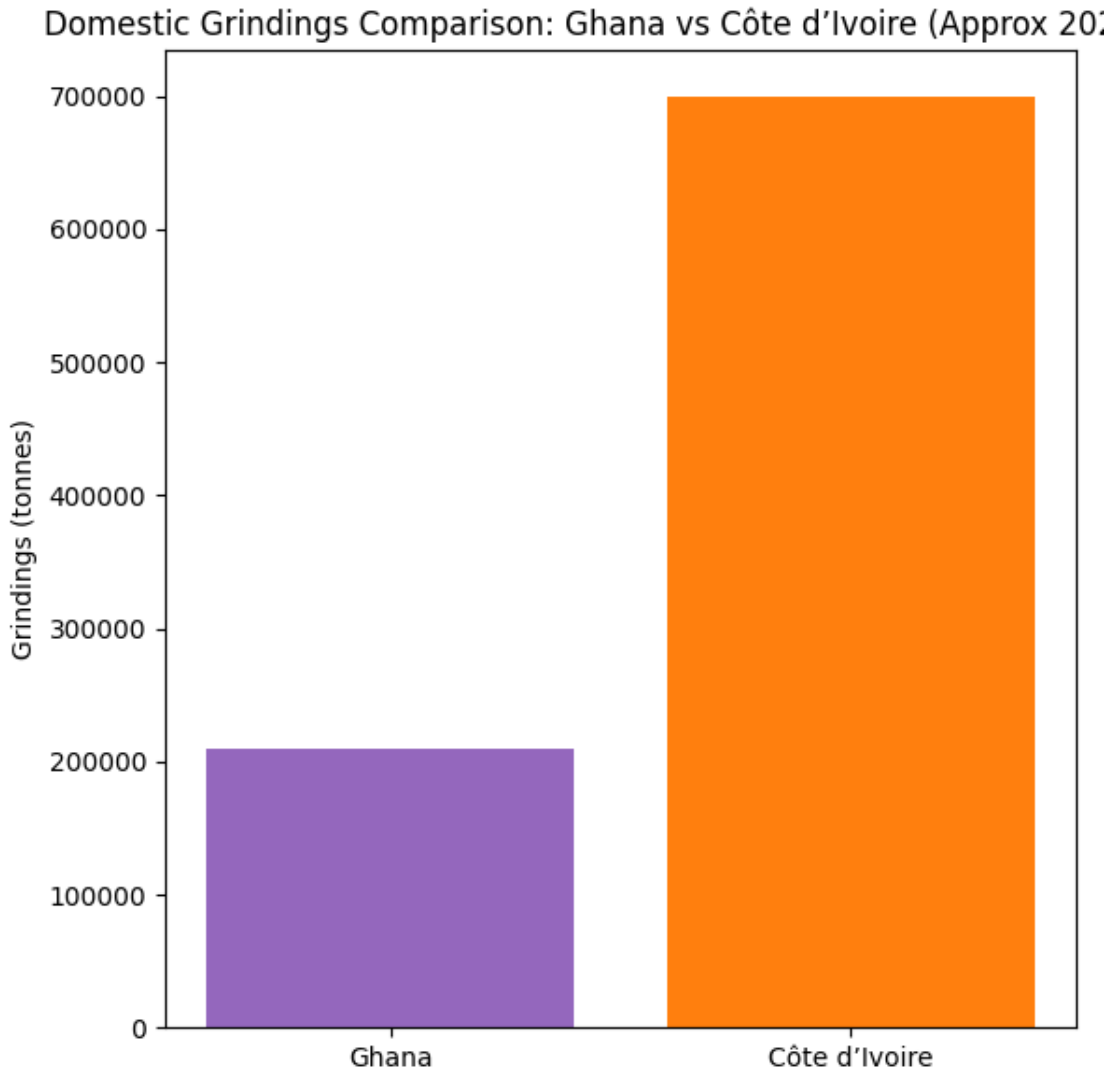

Figure 12: Domestic grindings comparison: Ghana vs Côte d'Ivoire (approx 2023/24). Côte d'Ivoire grinds more than three times Ghana's volume.

Figure 13 depicts the market share of major grinding companies in 2006 and 2015, illustrating industry concentration. Barry Callebaut, Cargill and ADM/Olam increased their shares between 2006 and 2015, while the share of smaller players declined. This consolidation gives the top firms significant bargaining power and the ability to relocate processing geographically. For producing countries, partnering with these firms brings investment but also limits their control over the value chain.

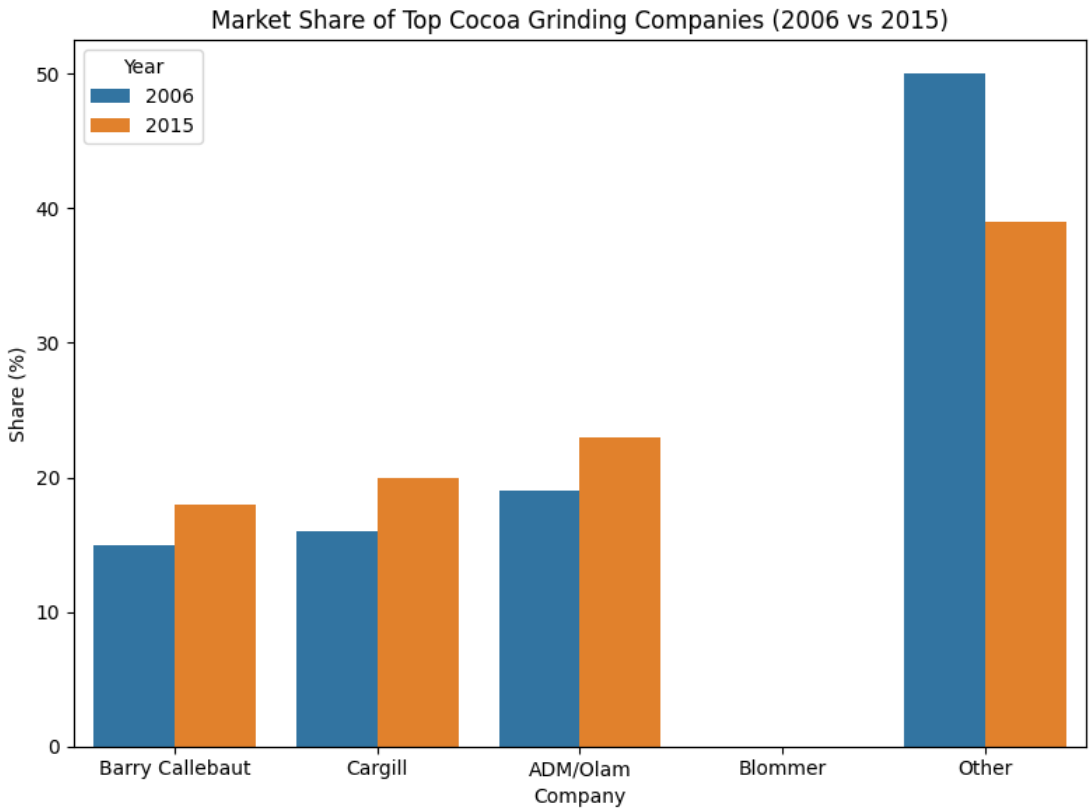

Figure 13: Market share of top cocoa grinding companies (2006 vs 2015). The top four firms increased their collective share to over 60 % by 2015 (Ref. 5).

The international nature of Ghana's cocoa trade is shown in Figure 14, which lists the top destinations for Ghanaian bean exports in 2023/24. The Netherlands dominates with imports of about 75 000 tonnes, followed by Belgium, the USA and Japan. Europe collectively accounts for more than two-thirds of Ghana's bean exports, underscoring the continent's continued importance as a processing hub. Asia and North America each account for roughly 16 %, while other regions are negligible. Diversifying export markets could reduce dependence on Europe and increase bargaining power.

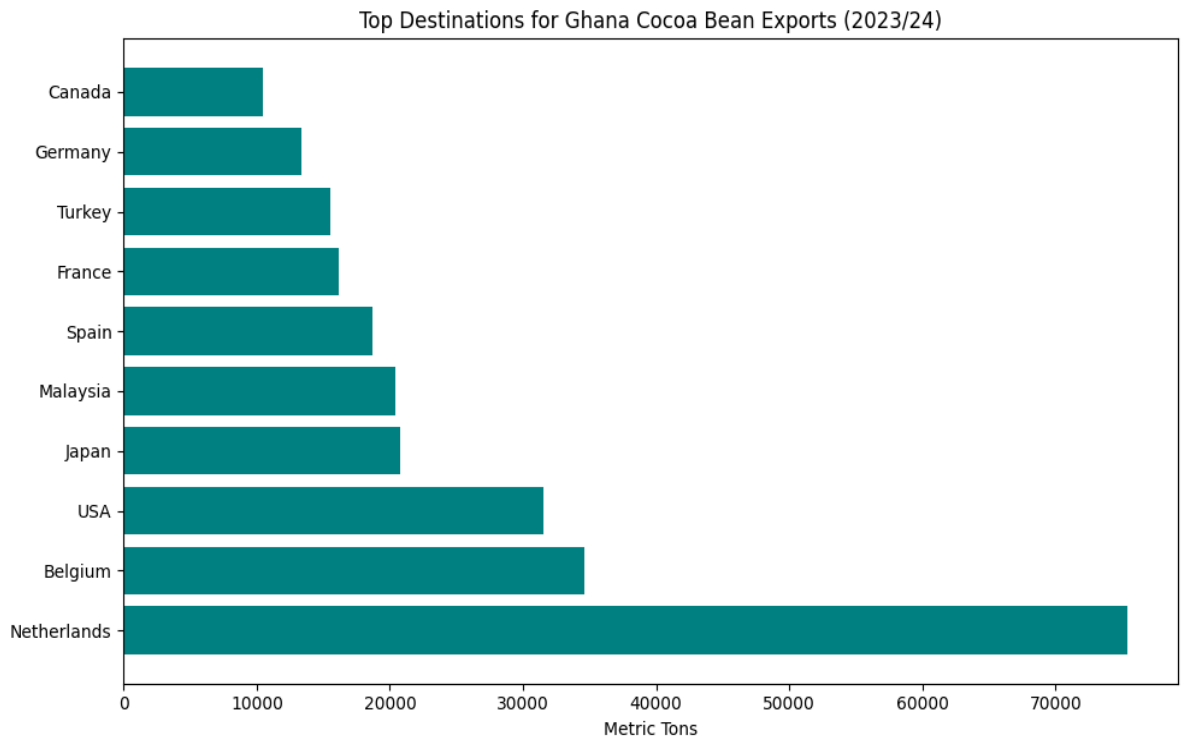

Figure 14: Top destinations for Ghana cocoa bean exports (2023/24). The Netherlands, Belgium and the USA are the largest importers of Ghanaian beans.

Figure 15 breaks down Ghana's bean export destinations by region using a pie chart. The European Union (EU) receives about 67.6 % of Ghana's exports, North America 16.3 %, Asia 16.0 % and other regions less than 1 %. This regional distribution aligns with the global processing shares shown in Figure 3 and suggests that supply chains remain closely tied to historical trade relationships.

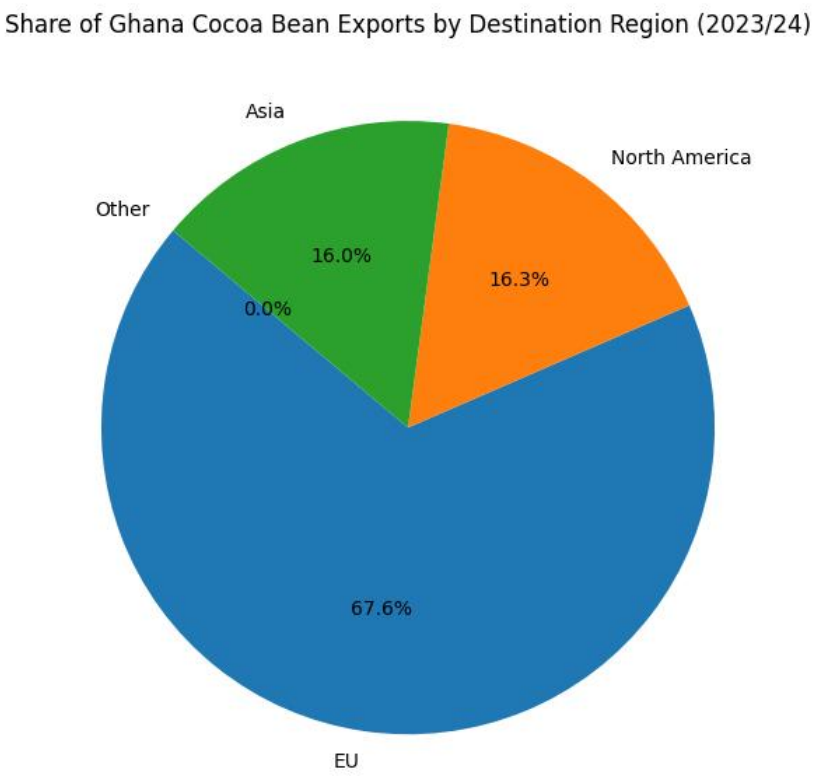

Figure 15: Share of Ghana cocoa bean exports by destination region (2023/24). Europe remains the dominant destination for Ghanaian beans.

Quarterly dynamics and price sensitivity

Quarterly grindings data provide insights into short-term demand fluctuations. Figure 16 shows Asia's quarterly grindings from Q1 2024 to Q2 2025, based on CAA reports. Grindings declined from 222 556 tonnes in Q1 2024 to 170 000 tonnes in Q2 2025, reflecting the impact of high cocoa prices and supply shortages. Figure 17 shows European quarterly grindings for 2022–24: volumes fell steadily after peaking in early 2022, with Q2 2024 grindings approximately 350 000 tonnes, down from 370 000 tonnes in Q2 2022. These declines correspond to the demand contraction reported by the Ecofin Agency (Ref. 10).

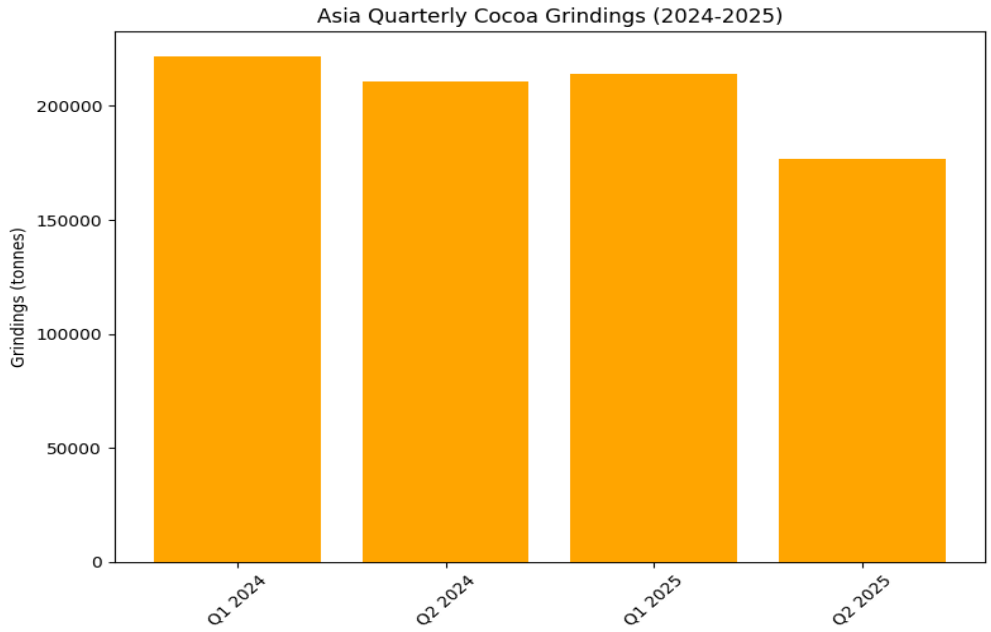

Figure 16: Asia quarterly cocoa grindings (Q1 2024–Q2 2025). Volumes declined sharply after Q1 2024 as record prices squeezed processors (Ref. 2).

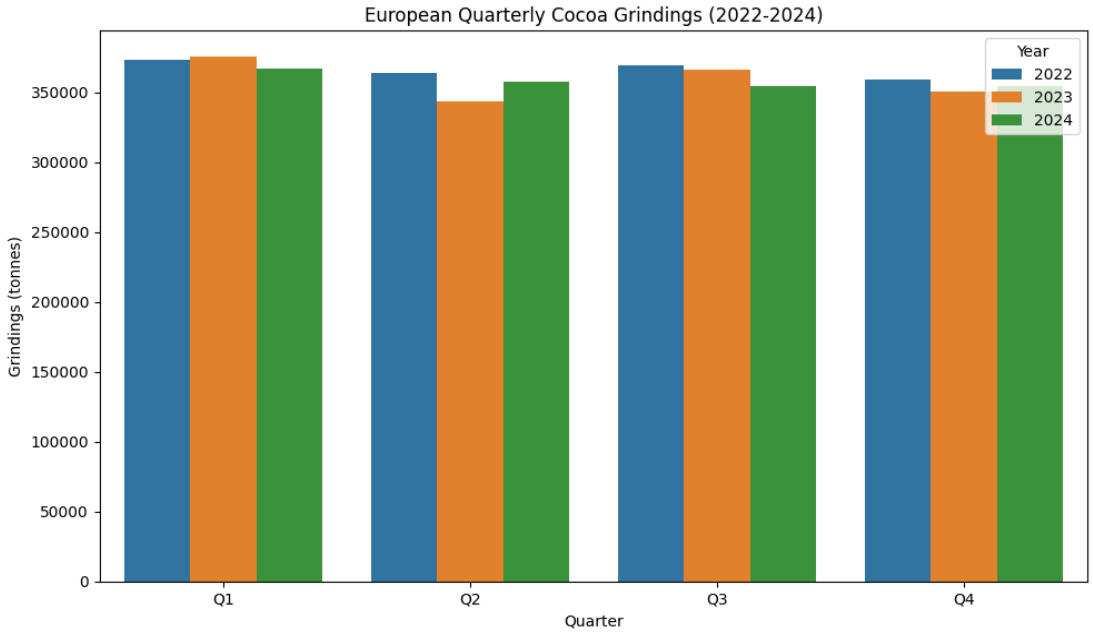

Figure 17: European quarterly cocoa grindings (2022–2024). Grindings fell steadily after 2022, reflecting weak demand and high bean costs.

Figure 18 plots cumulative year-to-date (YTD) grindings for Europe, Asia and North America in 2024. Europe's YTD grindings reached over 1 million tonnes by Q3, Asia's around

620 000 tonnes and North America's 320 000 tonnes. The chart illustrates that, despite declines, Europe still processes significantly more than other regions.

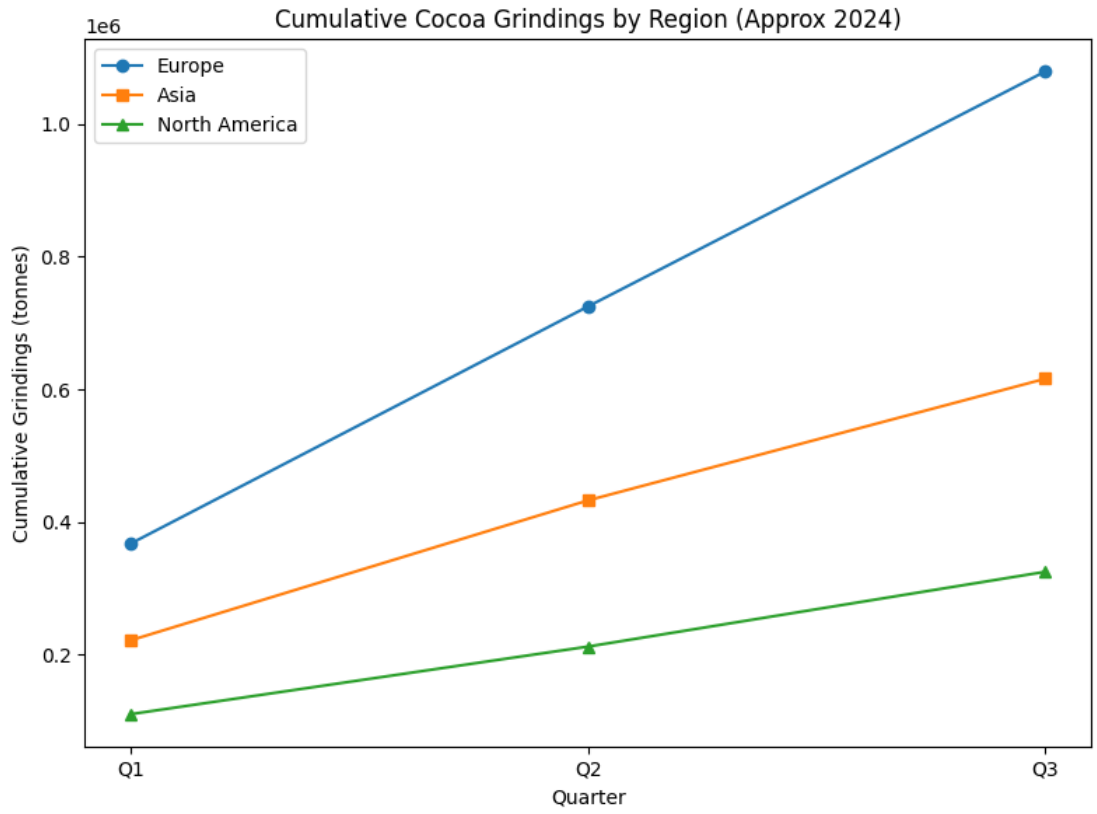

Figure 18: Cumulative cocoa grindings by region (approx 2024). Europe maintains the lead despite slower growth; Asia and North America follow.

Finally, Figure 19 examines the hypothetical relationship between cocoa prices and grindings for Europe and Asia. Prices are plotted on the horizontal axis (ranging from USD 2 000 to USD 8 000 per tonne) and grindings on the vertical axis. For Asia, grindings decline more steeply as prices rise, indicating higher price sensitivity. European grindings show a milder response, suggesting that processors in Europe may have longer-term contracts or hedging mechanisms that buffer price volatility. Although the plot is illustrative, it highlights that high prices in 2024–25 have contributed to reduced grindings, particularly in Asia, as reported by Nasdaq/Barchart (Ref. 11).

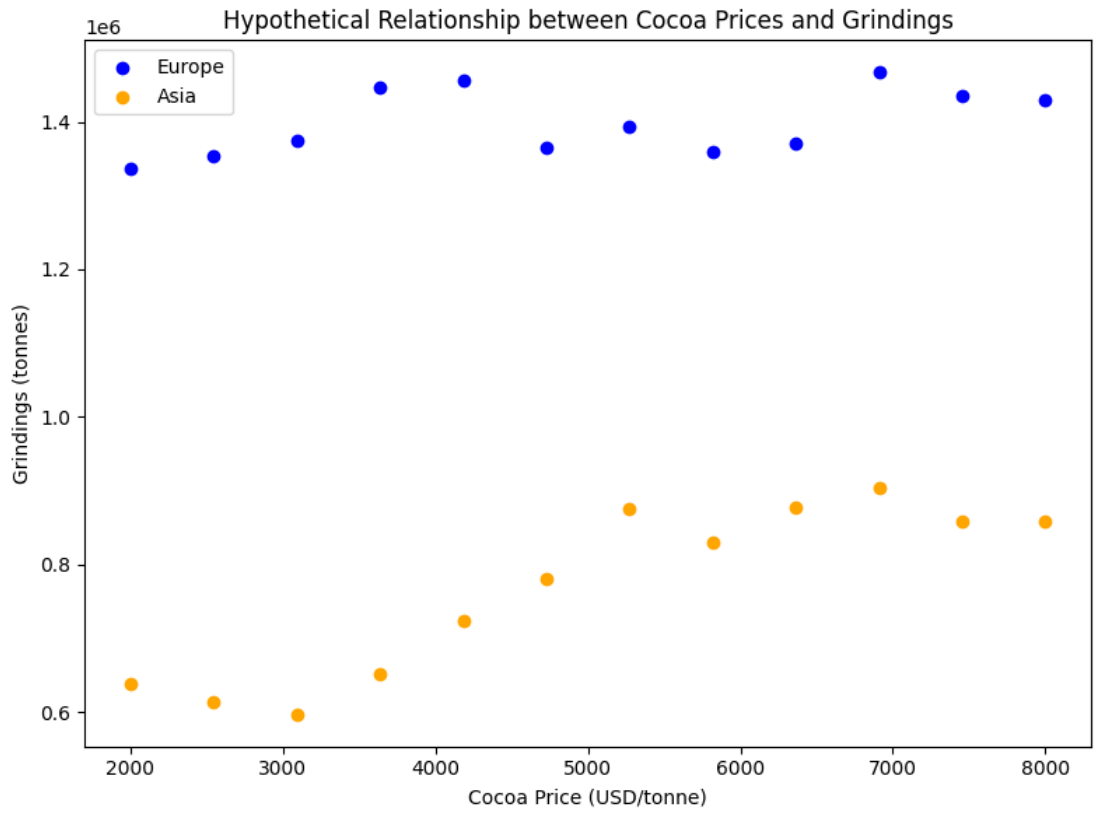

Figure 19: Hypothetical relationship between cocoa prices and grindings. Asian grindings appear more sensitive to price increases than European grindings.

Short-term disruptions

High-frequency data reveal how sudden shocks affect processing. Figure 20 compares Ivory Coast cocoa grindings in July 2024 and July 2025. Grindings fell from 57 000 tonnes to 39 000 tonnes, a decline of 31 % (Ref. 9). The drop was attributed to poor bean quality and restricted bean availability. Such disruptions highlight the vulnerability of origin processing to domestic supply problems and underscore the need for better agronomic practices and disease control.

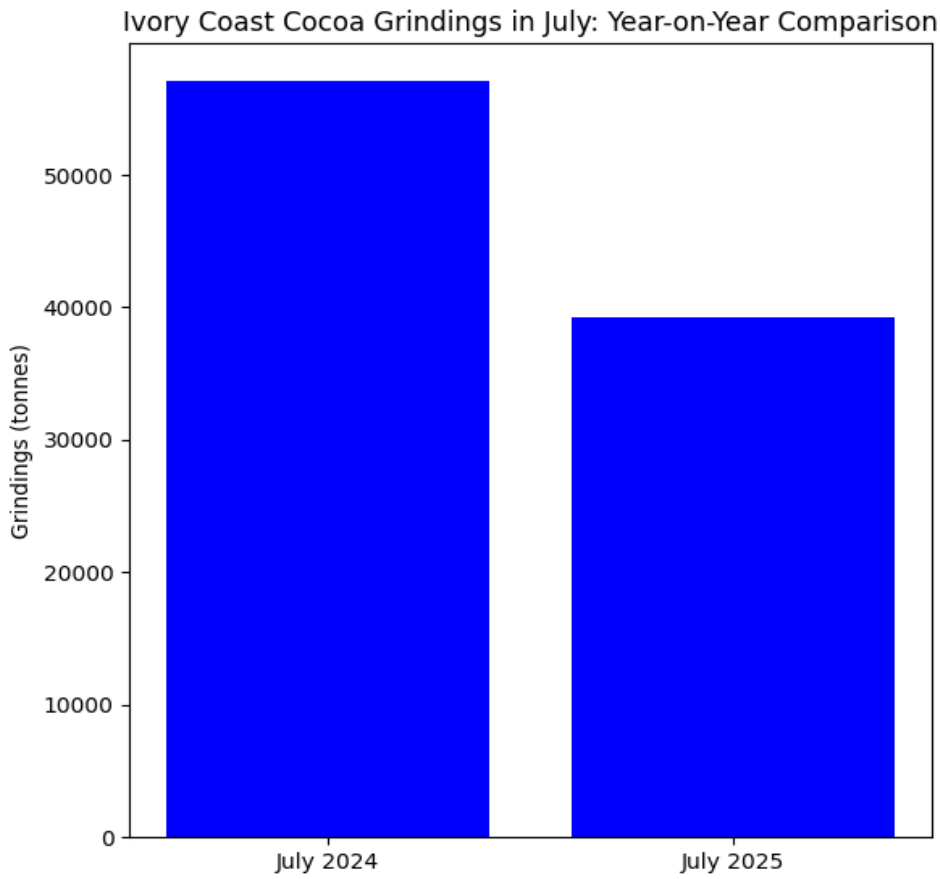

Figure 20: Ivory Coast cocoa grindings in July: year-on-year comparison. Grindings dropped 31 % in July 2025 due to poor bean quality (Ref. 9).

Discussion and Policy Implications

Interpreting demand trends

The data show that global cocoa grindings have grown modestly over the past decade, reflecting steady but not spectacular expansion of chocolate and cocoa product consumption. The slowdown since 2022 is largely cyclical, driven by unprecedented bean prices, inflationary pressures and inventory adjustments. Asia's decline illustrates how sensitive emerging markets are to price spikes. Europe and North America appear more resilient but still recorded lower grindings. In the medium term, growth will depend on economic recovery, household incomes and product innovation.

The structural shift toward origin processing is evident. Producing countries have doubled their share of global grindings over two decades, supported by policy incentives, lower freight costs and the strategic objectives of multinational grinders. This shift has diversified processing geographically and allowed some producing countries to capture more

intermediate value. Nevertheless, origin processing remains concentrated in a few countries (Côte d'Ivoire, Ghana, Indonesia) and continues to depend on foreign investment and know-how. Without local participation in downstream manufacturing and branding, the bulk of profits still accrues to companies based in consuming regions.

Implications for producing countries

For West African producers, expanding domestic processing offers potential benefits: increased employment, higher export revenues, and insulation from raw bean price volatility. Ghana's experience shows that building capacity is not enough; ensuring a reliable supply of quality beans is critical. Addressing smuggling, pests and diseases, and providing farmers with living incomes are prerequisites for sustaining processing. Policies such as Ghana's Living Income Differential (LID), which adds a premium to the farm-gate price, can support farmer incomes but must be accompanied by productivity measures.

Côte d'Ivoire's success highlights the role of favourable investment climates and partnerships with global grinders. However, the dominance of foreign firms raises questions about the distribution of rents. Governments should negotiate joint ventures that ensure technology transfer and local ownership. Investment in electricity, transport and port infrastructure is also vital to maintain competitiveness.

Implications for consuming regions

For Europe and North America, declining relative shares do not necessarily imply shrinking industries. Instead, they reflect the maturation of markets and the strategic relocation of primary processing. Europe remains a hub for higher-value manufacturing (chocolate bars, confectionery) and retains significant grinding capacity due to integrated supply chains and established brands. Maintaining this position requires ensuring sustainable sourcing, responding to consumer demand for ethically produced chocolate, and investing in innovation.

Market concentration and bargaining power

The high concentration of the grinding industry gives top firms considerable bargaining power over both producers and buyers. Vertical integration allows them to shift processing across regions to exploit incentives and arbitrage differentials. Producing countries must therefore coordinate policies to avoid a race to the bottom. Greater transparency in contracts and pricing mechanisms, as well as regional cooperation (e.g., through the Ghana–Côte d'Ivoire Cocoa Initiative), can strengthen negotiating positions.

Price volatility and demand

The hypothetical price–grindings relationship demonstrates that demand is price elastic, particularly in emerging markets. Record prices in 2024–25, driven by supply deficits, have suppressed grindings. Unless farmers receive higher farm-gate prices and productivity improves, supply shortages may persist, perpetuating high prices and constraining demand. Stabilisation mechanisms, such as buffer stocks or coordinated production management, could help smooth price cycles. At the consumer end, innovation in product formulations (e.g., reducing cocoa content or using substitutes) may also influence demand sensitivity.

Sustainability and social considerations

Expanding origin processing must be accompanied by sustainable practices. Cocoa farming is associated with deforestation, child labour and poverty. Certification schemes (Rainforest Alliance, Fairtrade) and corporate sustainability initiatives aim to address these issues but require strengthening. As more processing occurs at origin, environmental and social standards must be enforced locally. Investments in agroforestry, climate-smart agriculture and education are essential for long-term supply security and for meeting consumer demand for ethical products.

Policy recommendations

1. **Improve bean supply and farmer livelihoods** – Governments should invest in disease-resistant planting material, extension services and infrastructure to raise yields and reduce losses. Ensuring farmers receive a living income will reduce smuggling and encourage quality bean production.
2. **Encourage local participation in processing** – Policies should incentivise joint ventures that include local investors and provide skills training. Fiscal incentives (tax breaks, export rebates) must be balanced against the need to generate public revenue.
3. **Develop domestic and regional markets** – Promoting chocolate consumption through marketing campaigns and supporting downstream industries can create local demand. Regional trade agreements could facilitate intra-African trade in cocoa products.
4. **Enhance transparency and cooperation** – Producers should coordinate policies on export taxes, minimum prices and sustainability standards to strengthen their bargaining position vis-à-vis multinational grinders. Publishing more timely data on grindings would also enhance market transparency.
5. **Address environmental and social impacts** – Strengthen enforcement of labour laws, invest in education, and promote agroforestry to reduce deforestation.

International buyers should support these efforts through premiums and long-term contracts.

Limitations

The analysis is constrained by data availability. Comprehensive grinding data are proprietary, and this study relies on publicly reported figures and media summaries. Regional totals outside Europe and Asia are estimated based on residuals and may differ from actual values. Country-level figures are illustrative, and the charts serve as approximations rather than precise statistics. Further research with access to complete ICCO datasets and company reports would provide more accurate results. The scatter plot examining price sensitivity is hypothetical and should be interpreted qualitatively. Finally, the paper focuses on the demand side; supply issues (e.g., climate change, disease outbreaks) are discussed only insofar as they affect grindings.

Conclusion

The demand side of the cocoa economy is at a crossroads. After two decades of steady growth and gradual diversification, the industry is confronting historic price spikes, supply shortages and a cyclical downturn in consumption. Yet underlying structural changes continue to reshape the sector. Origin processing has expanded substantially, increasing its share of global grindings from 20 % to roughly 40 % and enabling producing countries to capture more value added. Côte d'Ivoire has become the largest origin grinder, while Ghana's experience illustrates the challenges of translating capacity into actual utilisation. Europe remains the largest grinder but faces declining relative importance as Asia, Africa and Latin America develop their industries.

Looking ahead, balancing the aspirations of producing countries with the realities of global markets will be crucial. Sustainable supply, fair farmer incomes, transparent trade practices and investment in downstream industries are necessary to ensure that value addition benefits local economies. For consumers, maintaining the affordability and availability of chocolate in the face of volatile prices may require innovation in product formulation and support for sustainable sourcing. Ultimately, the demand side dynamics explored in this report reveal both challenges and opportunities for stakeholders across the cocoa value chain.

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