



THIRD QUARTER 2024 LOGISTICS MANAGERS INDEX REPORT (July - September 2024)

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The LMI value for Ghana for the third quarter of 2024 is 65.4

The LMI for the third quarter of 2024 increased by 0.8 points to 65.4 from the previous quarter's 64.6 (second quarter of 2024).

Growth is INCREASING at an INCREASING RATE for all metrics except Inventory Costs and Transportation Prices.

(Kumasi, Ghana) – The third quarter 2024 Logistics Managers Index registered a value of 65.4, which is 0.8 points higher than the second quarter's value of 64.6. This marks the second consecutive increase in the growth of Ghana's LMI since March 2024. The slight growth in the LMI recorded in this quarter is driven by substantial growth in inventory levels, warehousing utilization, warehousing capacity and transportation utilization. Growth in warehousing capacity and warehousing prices, though quite insignificant, has contributed to the current overall LMI growth registered. On the other hand, inventory cost and transportation prices experience decreasing growth. In general, the steady economic situation in Ghana is reflected in this quarter's LMI with a slight growth in the overall value.

All the LMI metrics registered values above the threshold of 50 with the transportation prices recording the highest value and warehousing capacity registering the lowest value.

Researchers at the Centre for Applied Research and Innovation in Supply Chain – Africa (CARISCA) issued this report today.

The overall LMI score is a combination of eight distinct metrics that make up activities in the logistics sector: inventory levels and costs; warehousing capacity, utilization and prices; and transportation capacity, utilization and prices. A diffusion index, with a range between 1 and 100, is used to calculate the overall LMI. A reading above 50.0 indicates that logistics activities are expanding while a reading below 50.0 reflects a contraction of logistics activities.

The LMI summarizes the responses of supply chain, logistics, procurement and operations managers from multiple industries in Ghana. Data for the third quarter 2024 was collected from July to September, 2024.

REPORT HIGHLIGHTS

- ❖ The overall Logistics Managers Index (LMI) for Ghana for the third quarter of 2024 stands at 65.4, up by 0.8 percentage points from the second quarter reading of 64.6. This slight increase in growth can be attributed to the increasing rate of growth in inventory levels, warehousing capacity, warehousing utilization, warehousing prices, transportation capacity and transportation utilization.
- ❖ All the indicators for the third quarter are above the threshold of 50%. Findings from this quarter's survey indicate that inventory levels have experienced increasing growth, recording a value of 62 and in stark contrast to the second quarter's contraction in growth registered at 48.8 (a decline of 6.7 from the first quarter's value of 55.5). This quarter's value of 62 (up by 13.2 points) is the second highest inventory level recorded in the history of the Ghana LMI with the highest value being 65.5 (registered in the first quarter of 2022). This growth is very likely due to early stocking of inventory for the upcoming Christmas holidays. Speculative purchases could also be a major factor as retailers are cautious of increasing depreciation of the local currency on the forex exchange market. This is very plausible as the cost of doing business still remains high and steady from the previous quarter. The increasing rate of growth of inventory levels has had a positive effect on warehousing capacity (up by 4.8), transportation capacity (up by 16.1), warehousing utilization (up by 11.9) and transportation utilization (up by 11.5).
- ❖ Two of the logistics cost indicators are growing at a decreasing rate, with inventory costs recording a value of 84.0 (down by 6.8 points) and transportation prices recording a value of 92.2 (down by 4.6 points). The exception here has been warehousing prices, which is growing at an increasing rate of 84.7 (up by 2.4 points). Altogether, aggregate logistics cost decreased by 9 points registering a value of 260.9 (from the previous 269.9).
- ❖ Warehouse capacity grew at an increasing rate 59.5 (up by 4.8 points from the previous quarter's 54.7). Warehouse utilization demonstrated significant growth, reaching 65.4 - an increase of 11.9 points from the previous quarter's 53.5. This rise is primarily driven by higher warehousing utilization among downstream firms, particularly retailers, which recorded a value of 66.7 this quarter. In comparison, upstream firms registered a slightly lower utilization rate at 64.8.
- ❖ Transportation capacity grew at an increasing rate of 77.6 (up by 16.1) from the previous quarter's value of 61.5. This metric has picked up after it declined in the second quarter (from the first quarter's value of 63.2). A similar observation is made for transport utilization, which increased to 72.0 (up by 11.5 from the previous quarter's 60.5).

- ❖ The growth of logistics activities is expected to experience a slight decline in the next 12 months, with a predicted overall LMI of 64.0. This is a lower projection than the previous quarter's 67.03. Respondents' expectations about growth seem to be measured considering the prevailing economic situations in the country largely as a result of high inflation and depreciating local currency against the US dollar.
- ❖ The Electronic Payment System Index (EPI) experienced increased growth in the third quarter, rising to a value of 76.2 (an increase of 3.5 from the previous quarter's 72.7). This quarter's EPI value is the highest in the history of the Ghana EPI. It could be that as downstream partners stock up for the coming festive holidays, they are using more electronic payment systems to pay for goods and services (including import services). It is expected that the use of electronic payments within the logistics sector will grow steadily over the next twelve months, as fintech continues to receive broader acceptance and as economic situations in the country improve enabling firms to spend more.

WHAT LOGISTICS MANAGERS ARE SAYING – IMPACT OF THE LMI

The Ghana Logistics Managers Index (LMI) offers critical insights into the dynamics of logistics activities across the country and has been well-received by senior managers in numerous Ghanaian organizations. On average, 325 managers participate in the quarterly LMI surveys, providing valuable data on sector trends and shifts. Feedback from respondents highlights the LMI's impact, with many managers acknowledging its role as a market intelligence resource that enables data-driven decision-making for operational planning and activities. Several organizations participating in the LMI surveys have started incorporating updates from the survey in their regular meetings, with some even adopting it as a forecasting tool.

The influence of the LMI on Ghana's logistics sector is considerable. Beyond facilitating evidence-based decision-making, around 16% of respondents report that the LMI has prompted some level of policy change within their organizations. Reported changes are primarily in areas such as inventory management, forecasting, warehousing, and pricing. Additionally, insights from the LMI have supported the development of procurement policies, purchasing strategies, and enhanced company projections. A manager at Imperial Logistics, a prominent freight company in Ghana, shared that, "The information from the Ghana LMI reports supports us in strategic decision-making and operational planning. It serves as a benchmarking tool that provides an aggregated view of trends across the industry." This sentiment is echoed by many other managers familiar with the LMI reports, attesting to its utility in shaping both tactical and strategic decisions.

RESULTS OVERVIEW

This report presents the results of the third quarter of 2024 survey, which is the eleventh survey carried out since the inception of the Ghana LMI in March 2022. The results of the LMI continue to serve as predictive indicators of economic activities in Ghana as a whole. Figure 1.0 on the next page shows the Ghana LMI values from March 2022 (Q1) to the current quarter of September 2024.

In the third quarter of 2024, there was an increase in the overall LMI value to 65.4 from the previous quarter's 64.6 (up by 0.8). This is the second consecutive quarter where we have seen an increase

in logistics growth since March 2024. This quarter also produced the second highest recorded inventory level at 62.0. In general, Ghana's logistics activities are still in growth mode as all metrics are above the 50% threshold. We are yet to record an overall LMI value that is below the threshold. The overall LMI value for manufacturing firms and service firms was almost the same, registering 65.3 and 65.4 respectively. This was similar to the LMI value for upstream (at 65.5) and downstream (65.2) firms.

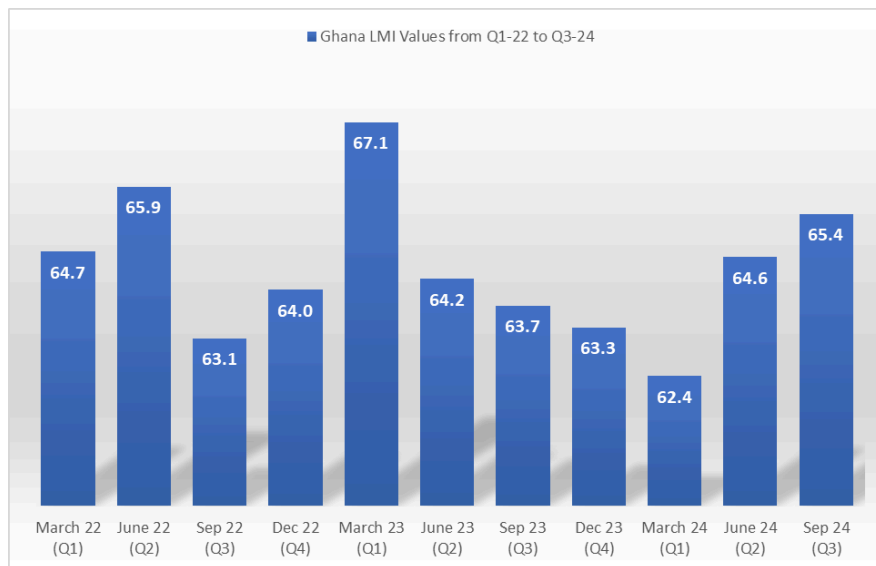


Figure 1.0: Ghana LMI values from March (Q1) 2022 to Sep (Q3) 2024

As earlier indicated, **inventory levels** experienced increasing growth this quarter registering a value of 62 (up by 13.2 from the previous quarter's 48.8). This quarter's inventory level is the second highest recorded in the history of the Ghana LMI. The highest value recorded occurred in the first quarter of 2022 and registered at 65.5 (see figure 2.0). The growth in inventory level, transportation capacity and warehousing capacity is what boosted overall growth in the LMI index. What is interesting is that we are seeing a significant increase in the growth of inventory levels at a period when national economic indicators are not significantly different from the previous quarter even though there was a slight decline in the rate of inflation. Ghana's inflation in June was recorded at 22.8¹ while inflation in September was recorded at 21.5 percent (down by 1.3).² This still not even close to predictions by Ghana's Central Bank of inflation dropping to a value between 13 and 17 percent by December 2024 and further to a value between 6 and 10 percent by 2025³. It seems the observed increase in inventory levels is as a result of speculative purchase to hedge against the risk of further depreciation of the Ghanaian cedi against the dollar as well as early stocking of inventory in anticipation of increased demand towards the Christmas holidays. The cedi is currently trading at 16.50⁴ cedis to the dollar and this trajectory of depreciation is expected to continue into the new year.

¹ <https://www.reuters.com/world/africa/ghana-consumer-inflation-slows-228-year-year-june-2024-07-10/>

² <https://www.reuters.com/world/africa/ghana-inflation-rises-second-month-october-2024-11-06/>

³ <https://www.reuters.com/markets/rates-bonds/ghana-central-bank-cuts-main-interest-rate-by-100-basis-points-2024-01-29/>

⁴ <https://www.google.com/finance/quote/USD-GHS?sa=X&ved=2ahUKEwj7wYWCmdOJAxW6QkEAHa6GKCGmY0JegQIGxAw>

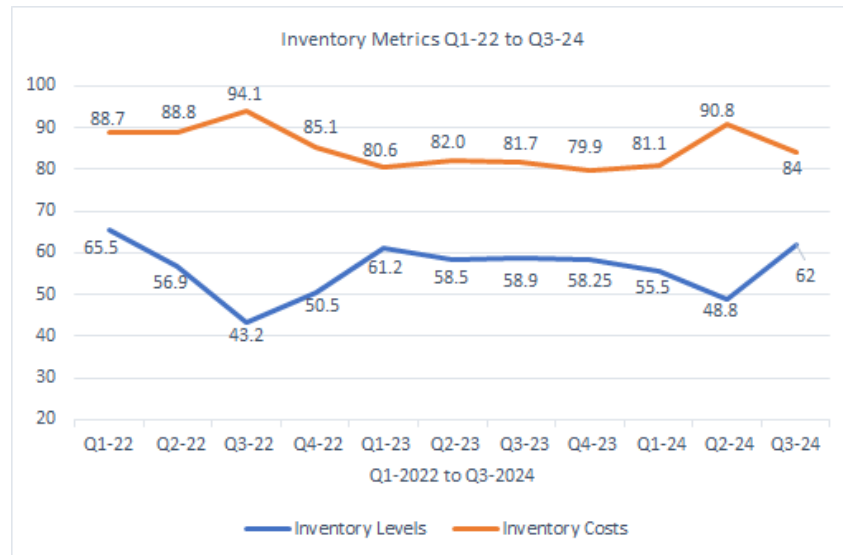


Figure 2.0: Inventory metrics from March (Q1) 2022 to Sep (Q3) 2024

The **inventory cost** metric registered a value of 84 (a decrease of 6.8 points from the previous quarter's 90.8). This implies that goods have become slightly less expensive in the third quarter of 2024 compared to the second quarter. The slight drop in inflation (1.8 percent between June and September) may be a contributing factor to the drop in inventory cost. Respondents predict a further shrinking of inventory costs in the next twelve months, to a value of 76.0 while inventory rises further to 73.8. Ghana seems not yet out of the woods with respect to current economic interventions making an impact in the marketplace. We will continue to observe how logistics activities will be impacted in the future.

Warehousing capacity grew from 54.7 in Q2 2024 to 59.5 in the present quarter (up by 4.8). **Warehouse prices** experienced growth at an increasing rate from 82.3 to 84.7 (up by 2.4 points). **Warehouse utilization** also showed notable growth, rising to 65.4, an increase of 11.9 points from the previous quarter's level of 53.5. This increase is largely attributed to higher utilization rates among downstream firms, mainly retailers, which reached 66.7 this quarter, compared to a utilization rate of 64.8 recorded by upstream firms.

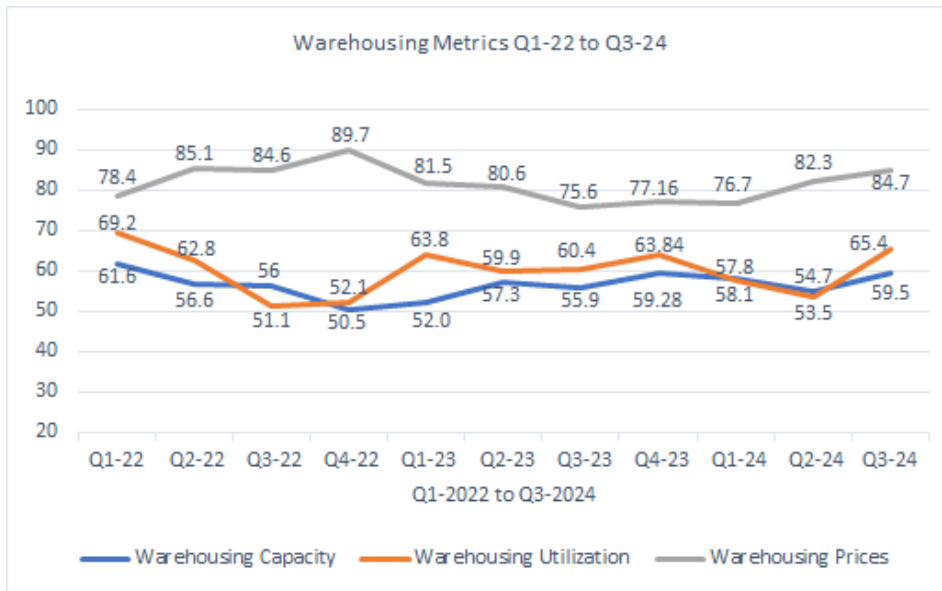


Figure 3.0: Warehousing metrics from March (Q1) 2022 to Sep (Q3) 2024

The **transportation price** according to this quarter’s survey has slightly declined to 92.2 (down by 4.6 points from the previous quarter’s 96.8). The key trigger to this slowed down growth is due to the reduction in the price of fuel by Oil Marketing Companies in September 2024. The price per litre of petrol and diesel was reduced by an average of GH 0.25 cedis (2 percent decrease) for petrol and GH 0.30 cedis (5 percent decrease) for diesel⁵ in response to significant drops in the prices of refined fuel on the international fuel market. Hopefully, this decline may be the start of a downward trend of decreasing growth for this metric. This metric reached its highest value of 97.1 in September 2022 (Q3). The **transportation capacity** metric registered a considerable increase at 77.6 (up by 16.1) from the previous quarter’s 61.5). There was also an increase in the **transportation utilization** metric, which registered a value of 72 from the previous 60.5.

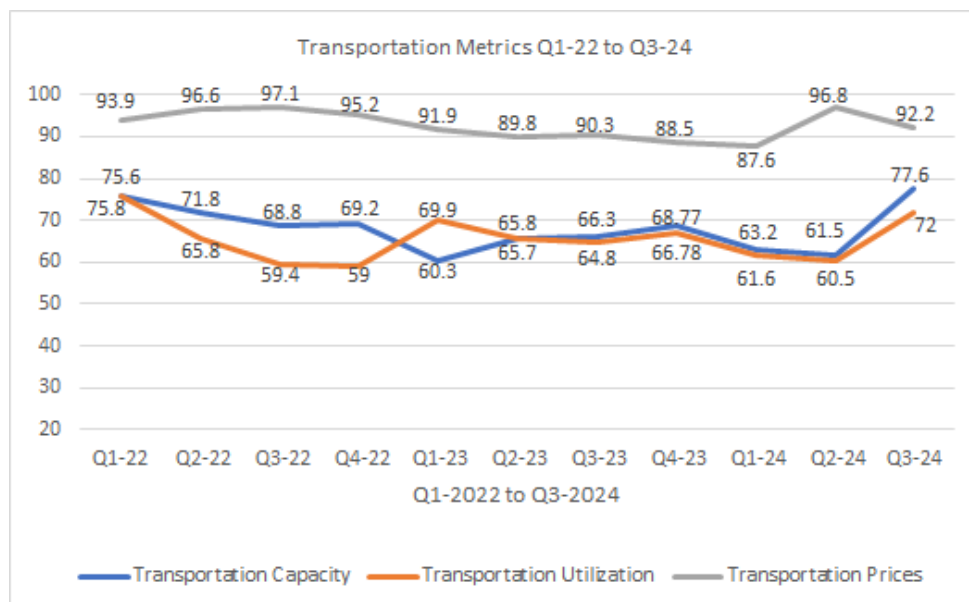


Figure 4.0: Warehousing metrics from March (Q1) 2022 to Sep (Q3) 2024

⁵ <https://www.myjoyonline.com/prices-of-petrol-diesel-lpg-to-decrease-between-2-and-5-ies/>

Aggregate Logistics Costs

Aggregate logistics cost is derived by summing up the three cost metrics (i.e., inventory cost, warehousing cost and transportation cost). With a threshold value of 150, it gives an indication of the logistics cost profile for each quarter. Figure 5.0 shows the aggregate logistics costs for Ghana for the third quarter of 2024, which is down to 260.9 from the previous quarter's value of 269.9. After the sharp increase in total logistics costs from the first quarter 2024 to the second quarter 2024, this decline is welcome news as it may be an indication of a trend of growth in cost factors slowing down. However, it's too early to conclude this. A run of three or more quarters with declining values would be a good indicator of the declining costs in the logistics industry.

Even though we see a slowing down of growth in aggregate logistics cost, logistics cost in Ghana is high and 110.9 points above the threshold of 150. This metric is directly linked to macro-economic factors affecting the country including cost of doing business, GDP, fuel prices and inflation. The current growth in inflation seems to inhibit aggregate costs from decreasing at a higher rate.

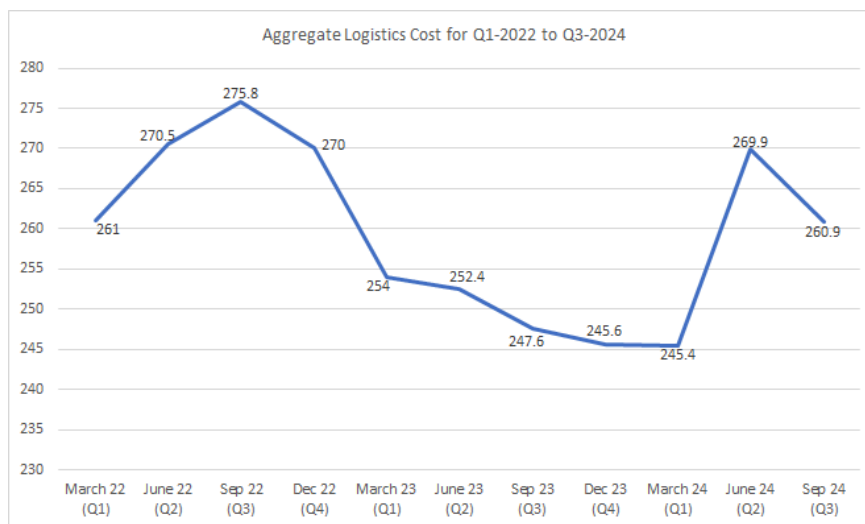


Figure 5.0: Aggregate logistics costs from March (Q1) 2022 to Sep (Q3) 2024

THIRD QUARTER 2024 OBSERVATIONS

Overall LMI

The overall LMI metric for Ghana in the third quarter of 2024 has increased by 0.8 points, registering a value of 65.4 compared to the previous quarter's (Q3 2024) value of 64.6. All metrics were in the growth category. There was a slowing of growth in inventory cost (registered at 84 and down by 6.8) and transportation prices (registered at 92.2 and down by 4.6).

All other metrics experienced increasing growth with inventory levels at 62 (up by 13.2), warehousing capacity at 59.5 (up by 4.8), warehouse utilization at 65.4 (up by 11.9), warehousing prices at 84.7 (up by 2.4), transportation capacity at 77.6 (up by 16.1) and transportation utilization at 72 (up by 11.5). We also observed a slight decline in aggregate logistics cost (from 269.9 to

260.9). Most of the metrics with the exception of inventory cost and transportation prices were growing at an increasing rate.

The index scores for each of the eight components of the Logistics Managers Index, as well as the overall LMI score for the third quarter of 2024, are presented in Table 1.0. There were no extremes in the values of the metrics with all the registering values above the threshold of 50%, which implies a growth in logistics activities. Albeit, a slow growth as inflation continues to threaten growth of logistics activities coupled with the consistent high cost of doing business and depreciation of the local currencies on the forex exchange.

Table 1.0: LMI Values for Ghana for Sep (Q3) 2024 and June (Q2) 2024

LOGISTICS AT A GLANCE – Q3 2024					
Index	Sep 2024 Index (Q3)	June 2024 Index (Q3)	Quarter-Over-Quarter Change	Projected Direction	Rate of Change
LMI®	65.4	64.6	0.8	Growing	Increasing
Inventory Levels	62.0	48.8	13.2	Growing	Increasing
Inventory Costs	84.0	90.8	-6.8	Growing	Decreasing
Warehousing Capacity	59.5	54.7	4.8	Growing	Increasing
Warehousing Utilization	65.4	53.5	11.9	Growing	Increasing
Warehousing Prices	84.7	82.3	2.4	Growing	Increasing
Transportation Capacity	77.6	61.5	16.1	Growing	Increasing
Transportation Utilization	72.0	60.5	11.5	Growing	Increasing
Transportation Prices	92.2	96.8	-4.6	Growing	Decreasing

Respondents anticipate that the growth observed in the logistics sector will experience a slight decline in the next 12 months and predict an LMI value of 64.0. This prediction is slightly lower than the second quarter prediction of 67.0.

Historic Logistics Managers Index Scores

The reading for the quarter 2024 index along with readings from the previous ten quarters of the LMI are presented in table 2.0. The LMI index registered an all-time average of 64.40; an all-time high of 67.1; and all-time low of 62.4 and a standard deviation of 1.35. The overall LMI index has consistently been in growth mode and fluctuations in its value has mostly come from fluctuations in the values of the logistics costs metrics (inventory cost, warehousing prices and transportation prices) as well as varying inventory level over the past quarters. The highest warehousing price was recorded in the fourth quarter of 2022 at 89.7 while the highest transportation price index was recorded in the third quarter of 2022 registering at 97.1. The lowest inventory level was recorded in the third quarter of 2022 (registered at 43.2 with an associated inventory cost of 94.1).

Table 2.0: Historic Logistics Managers Index Scores from March (Q1) 2022 to Sep (Q3) 2024

Quarter	LMI Values	
September (Q3) - 2024	65.4	All-time Average – 64.40 High – 67.1 Low – 62.4 Std Dev – 1.35
June (Q2) - 2024	64.6	
March (Q1) - 2024	62.4	
December (Q4) - 2023	63.3	
September (Q3) - 2023	63.7	
June (Q2) - 2023	64.2	
March (Q1) - 2023	67.1	
December (Q4) - 2022	64.0	
September (Q3) - 2022	63.1	
June (Q2) - 2022	65.9	
March (Q1) - 2022	64.7	

Downstream and Upstream Activities

The differences between observations made for firms downstream (orange colored bars in figure 6.0) and those upstream (blue colored bars in figure 6.0) are insignificant for all metrics with the exception of transportation capacity where downstream firms were marginally higher values than upstream firms (delta of 10.8). We often expect to see a balance between these two groups. On average, downstream firms reported slightly higher values than upstream firms for all the metrics in the third quarter (with the exception of warehousing and transportation prices albeit quite insignificant). Generally we observe that the growth or contraction of the activities of upstream firms tend to serve as predictors for downstream firms in the next period. It will not be surprising to see contracting inventory levels downstream as indicated by lower inventory levels among upstream partners.

Table 3.0: Upstream and Downstream values for Sep (Q3) 2024

Downstream vs. Upstream Values – Q3 2024				
Index	Downstream Values	Upstream Values	Delta	Significant?
LMI®	65.2	65.5	0.3	No
Inventory Levels	62.9	59.3	3.6	No
Inventory Costs	83.9	83.3	0.6	No
Warehousing Capacity	64.7	59.4	5.3	No
Warehousing Utilization	66.7	64.8	1.9	No
Warehousing Prices	88.2	83.3	4.9	No
Transportation Capacity	83.1	72.3	10.8	Marginal
Transportation Utilization	75.9	69.7	6.2	No
Transportation Prices	91.4	92.5	1.1	No

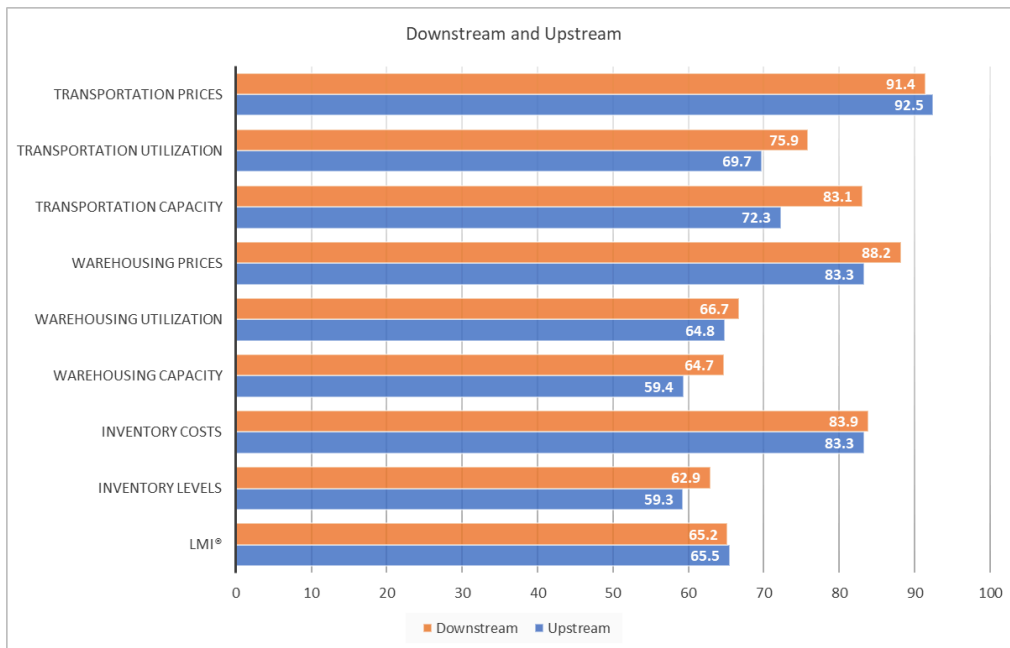


Figure 6.0: Downstream and Upstream values for Sep (Q3) 2024

Manufacturing vs Service Sector Activities

In general, there was no significant difference between values for manufacturing firms and service firms. However, manufacturing firms registered slightly higher values than service firms for all the cost metrics (inventory cost, warehousing prices and transportation prices) and warehouse utilization. For all other metrics service firms registered slight high values (though the difference was not significant). The overall LMI value for the manufacturing sector was 65.4, while that for the service sector was 65.3 (see figure 7.0 and table 4.0). It is usually expected that values for manufacturing respondents will be higher than that for service respondents. It is interesting to note that 77.85 percent of this quarter's respondents were in the service sector while those from manufacturing constituted 22.2 percent. The results of the last quarter (Q2) were similar, with the overall LMI for the manufacturing sector registering 63.4 while the service sector registered 60.3.

Table 4.0: Values for Manufacturing and Service Sectors, (Sep Q3) 2024

Values for Manufacturing and Service Sectors – Q3 2024				
Index	Manufacturing Values	Service Values	Delta	Significant ?
LMI®	65.4	65.3	0.1	No
Inventory Levels	58.3	62.3	4	No
Inventory Costs	84.3	82.9	1.4	No
Warehousing Capacity	57.2	60.9	3.7	No
Warehousing Utilization	67.7	65.7	2	No
Warehousing Prices	88	83.6	4.4	No
Transportation Capacity	79.1	76.5	2.6	No
Transportation Utilization	67.7	74.6	6.9	Marginal
Transportation Prices	93.6	91.6	2	No

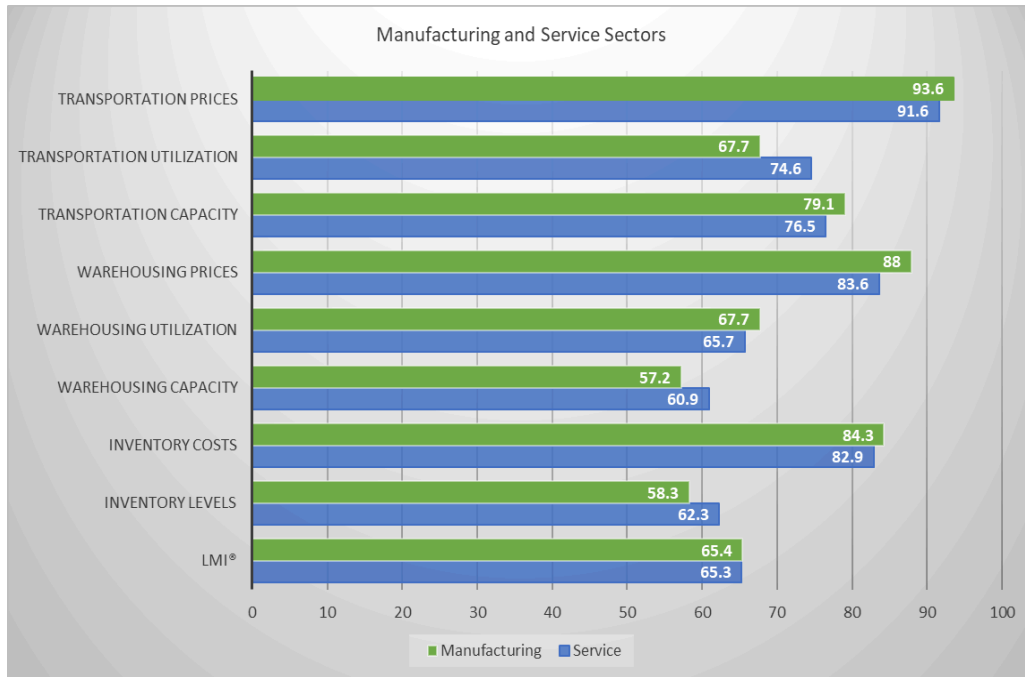


Figure 7.0: Values for manufacturing and service sectors, Sep (Q3) 2024

PREDICTIONS

Respondent predictions are solicited to gauge their expectations. In the third quarter survey, respondents were asked to predict movement in the overall LMI and individual metrics, 12 months from now. The predictions made in this quarter present mixed views compared to the previous quarters predictions (as seen in table 5.0). The current LMI value is predicted to steadily drop to 64.0 while June (Q2) predictions indicated an increase to 67.0

Similar to the third quarter of 2023, respondents expect inventory levels to build up to 73.8 and inventory costs to contract to 76.0. Respondents also anticipate that warehousing capacity will rise to 71.4 while warehousing utilization will increase to 76.6.

The warehouse price metric is predicted to decrease further to 75.7, while transport capacity increases to 75.7. Respondents expect transport utilization to increase to 76.9, while the transportation price metric is expected to drop to 79.0. Respondents generally predict that the growth of the cost metrics (inventory cost, transportation price and warehouse price) will slow down over the next 12 months, while inventory levels and the utilization metrics (transport and warehousing) increase.

Table 5.0 shows the predicted values for all eight metrics from this quarter's survey (September 2024). Figure 8.0 compares both current and predicted values for September 2024.

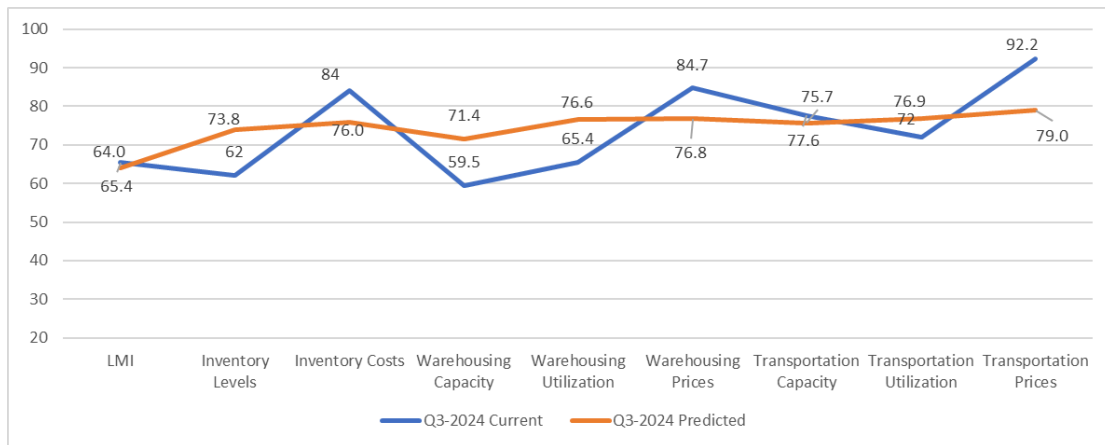


Figure 8.0: Current and Predicted Values – Sep (Q3) 2024

Table 5.0: Comparing June (Q2) predictions with that of Sep (Q3) 2024

LOGISTICS AT A GLANCE – Predicted Values (Q4 2023 and Q1 2024)		
Index	June 2024 - Predicted	Sep 2024 - Predicted
LMI	67.0	64.0
Inventory Levels	67.1	73.8
Inventory Costs	78.6	76.0
Warehousing Capacity	67.3	71.4
Warehousing Utilization	80.4	76.6
Warehousing Prices	76.4	76.8
Transportation Capacity	68.9	75.7
Transportation Utilization	77.1	76.9
Transportation Prices	83.7	79.0

Upstream and Downstream (Predicted)

Similar to the main predictions by the respondent firms, there was no significant difference in the disaggregated predictions between downstream retailers (orange colored bars in figure 9.0) and upstream firms (blue colored bars in figure 9.0). The difference in prediction for the overall LMI index between downstream and upstream firms is 1.3. While the difference is not significant, downstream retailers in general expect to see slightly higher levels of growth in all the metrics compared to their upstream counterparts. Downstream firms expect to see inventory levels continue to build over the next 12 months, more than upstream firms. The same goes for transport prices, transport utilization, inventory cost, warehousing prices, warehousing utilization, and transport capacity (see table 6.0).

Though most of the differences are insignificant, in the case of warehousing capacity, transportation capacity and transportation prices there is a marginal difference between predictions by downstream firms and upstream firms.

Table 6.0: Predicted Upstream and Downstream Values – Sep (Q3) 2024

Predicted Upstream vs. Downstream Values – Q3 2024				
Index	Predicted Downstream Values	Predicted Upstream Values	Delta	Significant?
LMI®	65.2	63.9	1.3	No
Inventory Levels	75.3	73.7	1.6	No
Inventory Costs	79.4	75.6	3.8	No
Warehousing Capacity	80.1	67.5	12.6	Marginal
Warehousing Utilization	81.1	74.3	6.8	No
Warehousing Prices	82.3	76.9	5.4	No
Transportation Capacity	82.2	73.9	8.3	Marginal
Transportation Utilization	81.8	74.3	7.5	No
Transportation Prices	83.1	77.9	5.2	Marginal

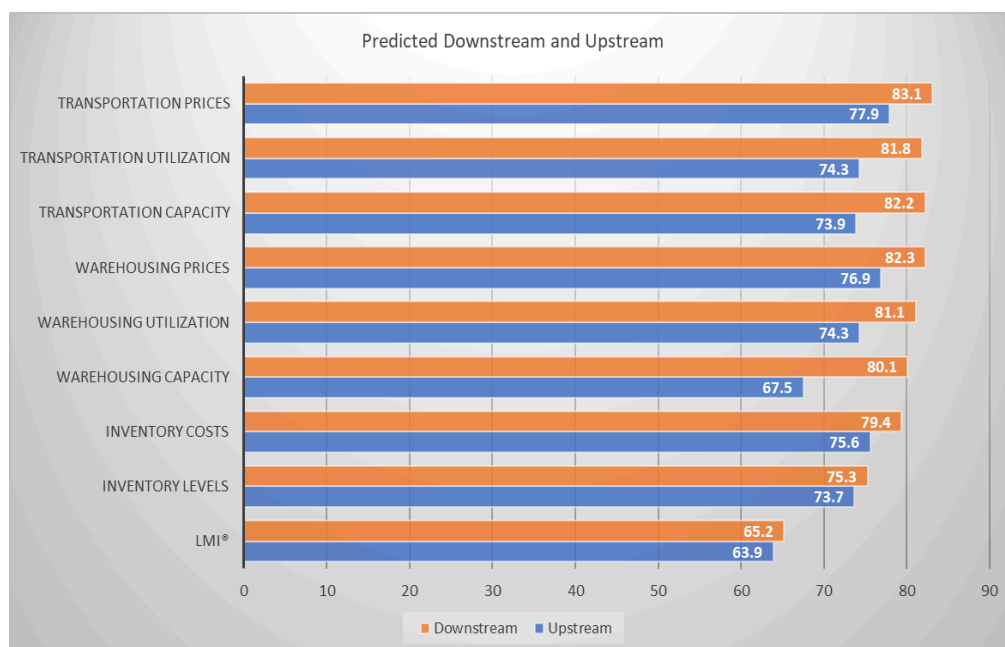


Figure 9.0: Predicted Downstream and Upstream Values – Sep (Q3) 2024

ELECTRONIC PAYMENT SYSTEMS INDEX

The **Electronic Payment Systems Index (EPI)** tool is similar to the LMI tool and measures the usage of electronic payment systems. The Ghanaian logistics industry is rapidly adopting digital technologies to enhance operational efficiency and improve customer service. The government's Digital Ghana Agenda⁶, which seeks to improve economic inclusiveness through technology seems to have paid off with several digital innovations introduced. We see the EPI to be our contribution to this agenda by measuring the extent of adoption of digital payment systems spanning mobile money transfers (e.g. MoMo in Ghana and M-Pesa in Kenya) to electronic bank transfers in the logistics sector. Introduced in the second quarter of 2022, the EPI has a threshold of 50% and is also developed as a diffusion index. Respondents were asked about their company's use of mobile money and e-payment platforms in terms of their decline, steady state or increase. Respondents were also asked about the extent to which their organization utilizes mobile money transactions and e-payment systems when dealing with customers and/or suppliers.

The EPI for the third quarter of 2024 registered a value of 76.2 from the previous quarter's 72.7 (an increase of 3.5), as indicated in figures 10.0 and 11.0. After a dip in Q4 2023 (from 73.9 in Q3-23 to 69.8 in Q4-23), this index has steadily gained growth each quarter leading to this quarter's all-time high value of 76.2. This quarter's EPI results gives a positive outlook of e-payment usage in relation to logistics activities and transactions and respondents predict greater growth for this index in the next twelve months (up to 83.9). The lowest value of the index was registered in the second quarter of 2023 when the index dropped to a value of 61.0. That period was generally marked by a high inflation and soaring business cost and it was not surprising that usage of electronic payment systems dropped as captured by the EDI.

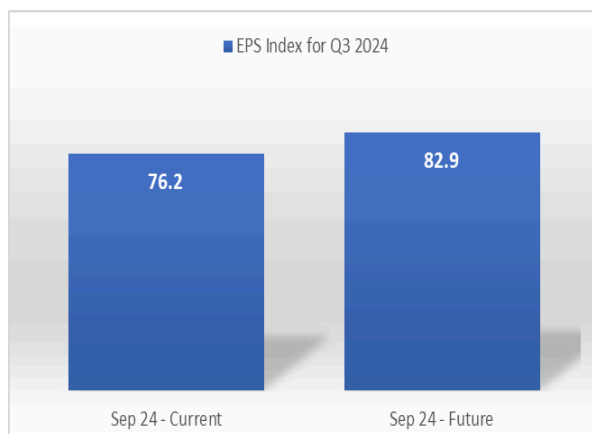


Figure 10.0: Current and predicted values for the EPI for Sep (Q3) 2024

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<https://moc.gov.gh/ministers-press-briefing-communications-ministry-makes-strides-in-ghanas-digital-transformational-age-nda/#:~:text=%E2%80%9CThis%20simply%20means%20that%20Ghanaian%20subscribers%20of,also%20be%20exempt%20from%20international%20roaming%20charges.%E2%80%9D>

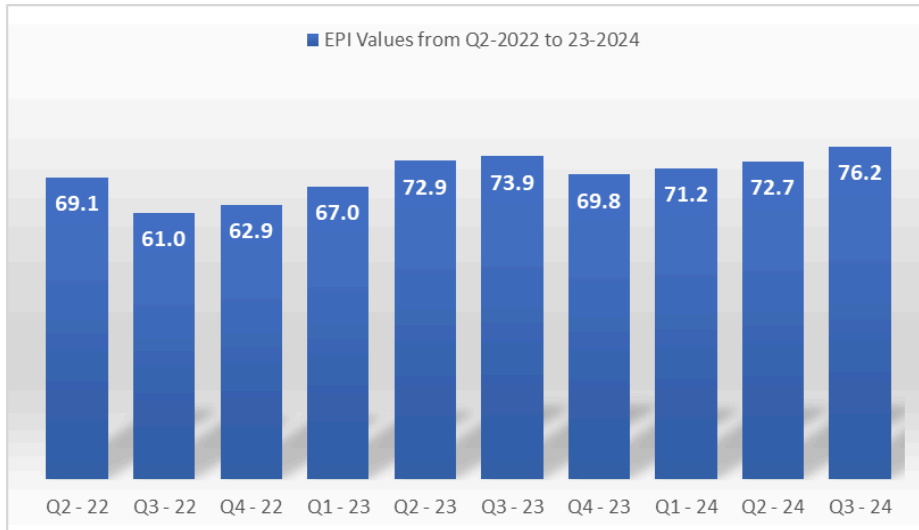


Figure 11.0: EPI values for June (Q2) 2022 to Sep (Q3) 2024

About This Report

The Logistics Managers Index (LMI) is a tool developed by researchers at the Centre for Applied Research and Innovation in Supply Chain – Africa (CARISCA), based at Kwame Nkrumah University of Science and Technology (KNUST), for Ghanaian businesses and policymakers. The LMI reports are based on quarterly surveys conducted with industry leaders in Ghana. The study is led by Emmanuel Kweku Quansah (PhD), Nathaniel Boso (PhD) and Abdul Samed Muntaka (PhD). CARISCA wishes to acknowledge the support of the Chartered Institute of Logistics and Transport (CILT) and the Chartered Institute of Procurement and Supply (CIPS) in disseminating the report.

The calculated LMI for Ghana, along with the accompanying analysis of its components, provides useful insights for the government of Ghana, business decision-makers, market analysts and investors, as it offers a predictive indication of overall economic activity in the country. The LMI report is made available quarterly at <https://carisca.knust.edu.gh/LMI>. Senior supply chain (including logistics, operations and procurement) managers of businesses in Ghana are invited to participate in the quarterly LMI surveys by visiting: <https://www.surveymonkey.com/r/Q4-24-LMI>

The LMI measures the growth or decline of Ghana's logistics industry along three components: inventory, warehousing and transportation activities. The LMI for Ghana study utilizes eight metrics across the three components to capture Ghana's logistics activities. The index measures combinations of inventory, warehouse and transportation activities and tracks the relationship between these variables to make inferences about their effects on the broader Ghanaian economy.

An index score is calculated for each of the eight components, and an overall index score (i.e., an LMI value) is then calculated as a composite of these components. This approach is an effective and a reliable way to identify prevailing trends in logistics activities. Due to its predictive nature, the LMI is also a useful tool for forecasting future trends in a modern economy (Rogers et al., 2019).

Data and Methodology

Data for the Logistics Managers Index for Ghana are collected in quarterly surveys. Respondents for the study include senior logistics, supply chain and procurement executives and managers in the formal sector of the Ghanaian economy. Senior executives and managers are most likely to have macro-level information on inventory, warehousing and transportation trends in their organizations. Data is also collected from professional members of the Chartered Institute of Logistics and Transport (CILT) and the Chartered Institute of Procurement and Supply (CIPS). Members of these professional bodies in Ghana tend to hold senior management positions in their organizations.

To ensure that the LMI value for Ghana is a true reflection of logistics activities in the Ghanaian economy, the respondents for this study were required to be working for organizations that operate in Ghana. Multiple industries were represented in the respondent pool: automobile and parts, telecommunications, shipping and transport, agriculture and agriculture business, manufacturing, mining, pharmaceuticals, industrial services, oil and gas/petroleum, and machinery and equipment.

A total of 257 valid responses were used for the Q3 2024 report.

The Diffusion Index

The LMI for Ghana is calculated using the diffusion index. The diffusion index is used to calculate other widely accepted indexes, such as the Purchasing Managers Index (PMI) and the USA LMI.

This index gives an indication of whether the metric being evaluated is contracting or growing. Values below 50.0 suggest a contraction, while values above 50.0 suggest growth in an activity (Getz and Ulmer, 1990). Diffusion indexes are used to measure how widely a variable is spread across a group. The Institute for Supply Management (ISM) has been using the diffusion index to compute the Purchasing Managers Index since 1948. In keeping with the approach by Rogers, et al. (2018) and ISM, we computed the diffusion index as follows: $DI: 0.0 * PD + 0.5 * PU + 1.0 * PI$ Where PD = % of respondents saying a category is declining, PU = % of respondents saying a category is unchanged, and PI = % of respondents saying a category is increasing.

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The Logistics Managers Index (LMI) for Ghana makes no representation other than that stated in this release regarding the individual company data-collection procedures. The data should be compared to all other economic data sources when used in decision-making.

To participate in the LMI survey, go to <https://www.surveymonkey.com/r/Q4-24-LMI>



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