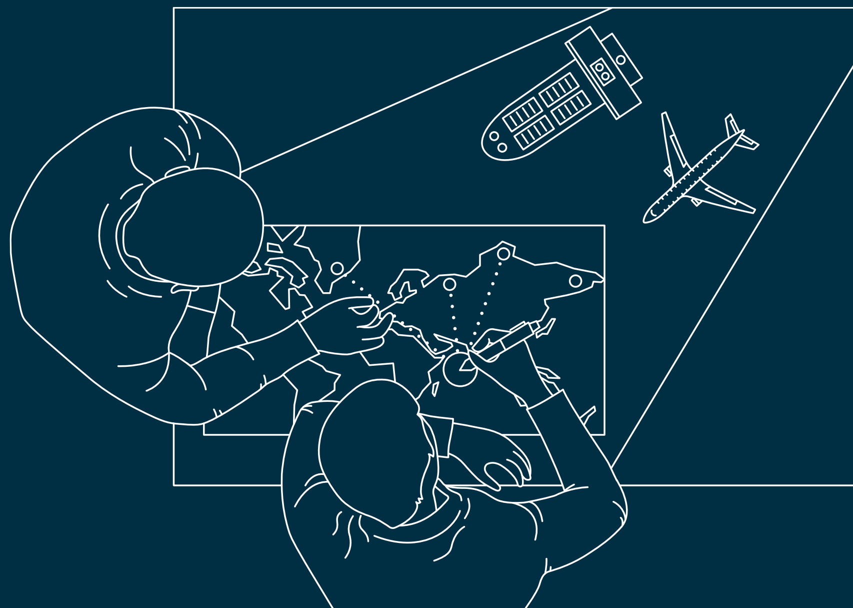

Economic Prospects in Black Sea Region

Transport Events, Poti - March 12th 2025

Services

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Our technical advisory services underpin all the work that we do. Our advisors are with you every step of the way, from the stage of evaluating investment opportunities and risks, to value creation and divestment.

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The infrastructure landscape is changing. Increasingly, ESG is playing a key role in investment decisions. We provide a comprehensive range of ESG services relating to project finance, portfolio & asset sustainability, and divestment & investment.

Index

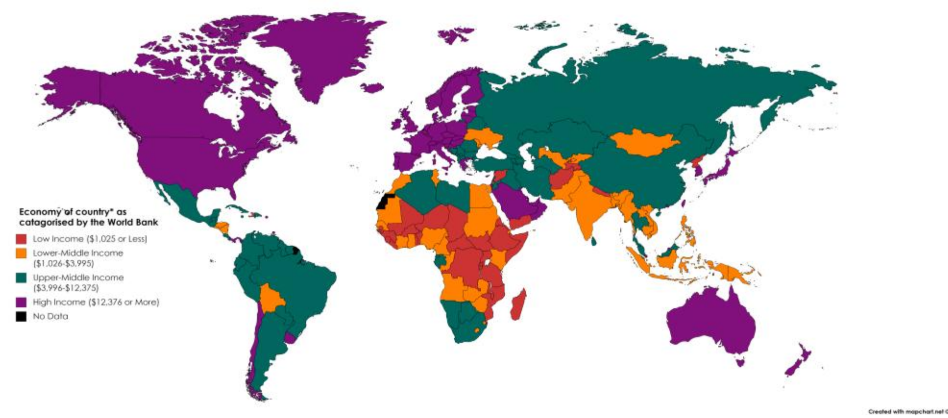
- Summary of Global Economy and Trade (2024)
- Impact of System Shocks (2024)
- New Alliance Structure (2025)
- 2025 and The Future
- Black Sea Potential links with Central Asian Economies
- Conclusions

Summary of Global Economy

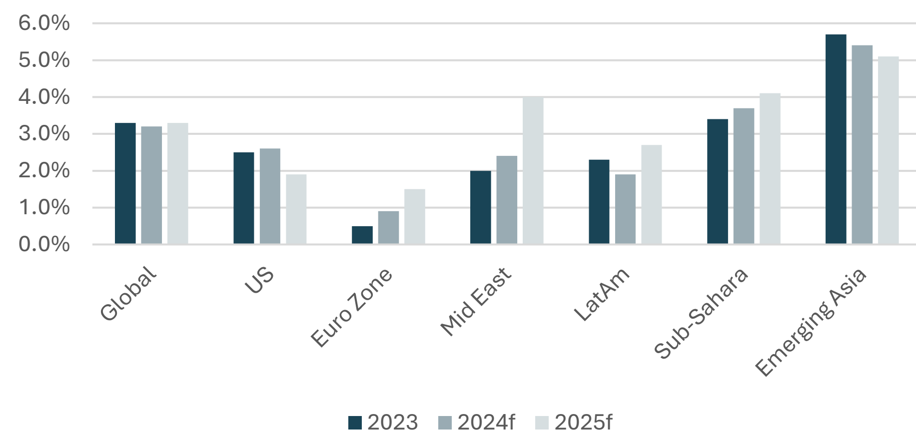
Stabilising global economy, with inflation forecast to decline steadily and a resilience to recent system shocks

- The forecast for global growth five years from now, at 3.1%, according to the IMF.
- Global inflation is forecast to decline steadily, from 6.8% in 2023 to 5.9% in 2024 and then 4.5% for 2025, with advanced economies returning to their inflation targets sooner than emerging markets
- Nevertheless, the global economy has been surprisingly resilient, especially to recent system shocks and ongoing developments.
- The overall position from the World Bank is that the global economy looks set to continue to stabilise, albeit at lower growth than recent historic levels.
- "However, growth is at lower levels than before 2020. Prospects for the world's poorest economies are even more worrisome. They face punishing levels of debt service, constricting trade possibilities, and costly climate events.
- Developing economies will have to find ways to encourage private investment, reduce public debt, and improve education, health, and basic infrastructure."

Categories of Economy by World Bank



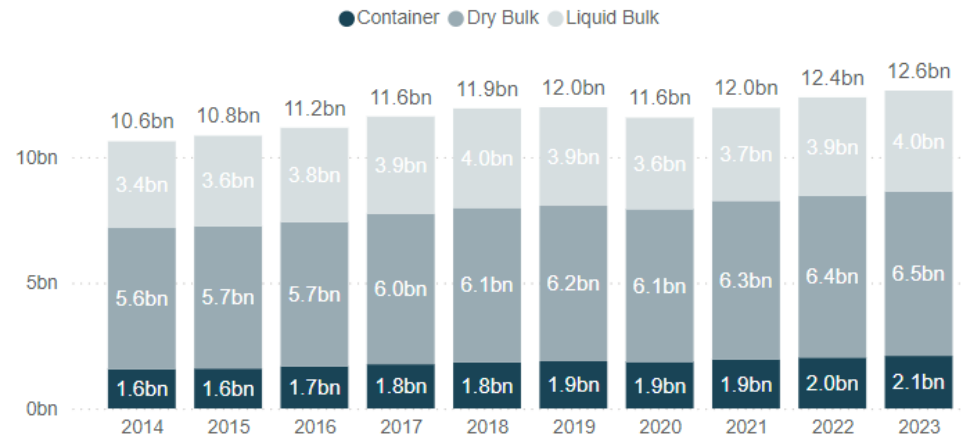
GDP Growth by Global Region 2023-2025f from IMF, in %

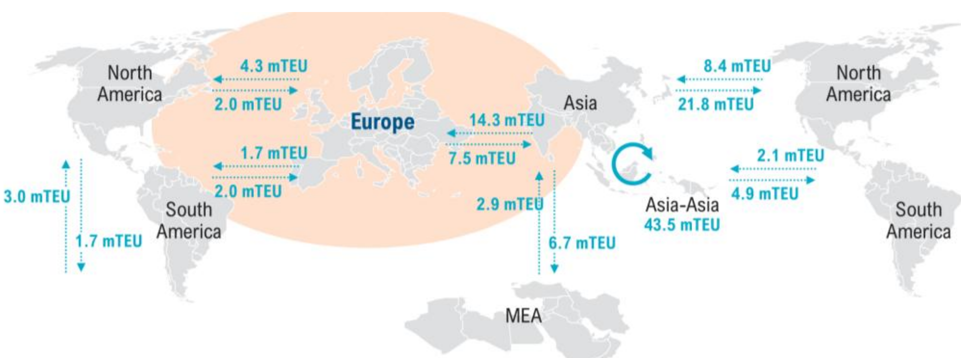


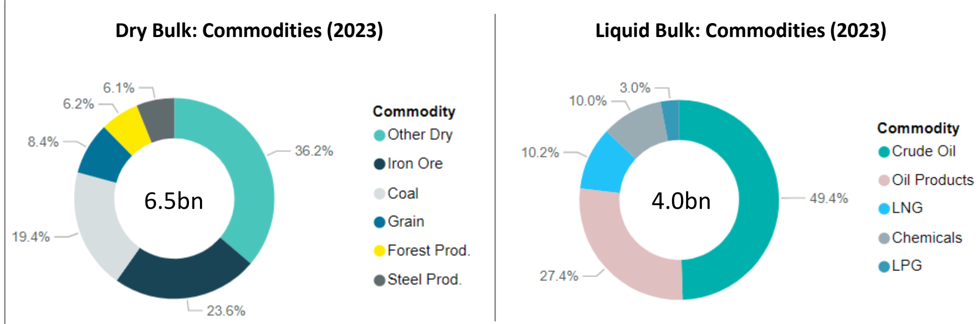
Global Trade

Total global seaborne trade continues to increase, led by dry bulk – in 2023 the overall total reached 12.6bn tonnes

- Global seaborne trade reached 12.6bn tonnes in 2023, reflective of continued growth over the past 10 years – dry bulk, liquid bulk and containers have all contributed to the increases.
- The impact of the COVID-19 pandemic in 2020 was soon overcome in 2021 and annual growth resumed thereafter.
- Iron ore and coal are the largest two individual dry bulk commodities, with oil and oil products the major liquid bulk goods shipped.
- An indication of estimated container flows are also shown (below). Intra Asia remains the largest trade in terms of volumes, but Asia-North America and Asia-Europe are also largescale trades that ports serve.







System Shocks – Red Sea Challenges

Challenges for shipping in utilising the Red Sea and the Suez Canal remains, though there is also some rationale for the situation suiting container shipping lines – status quo to remain for the foreseeable future

- Challenges in the Red Sea remain for ocean carriers and shippers.
- The same choice is available in 2024, namely:
    - A longer transit time (8-10 days) if Suez Canal and Red Sea deemed unsafe or unsuitable – hence use the Cape option.
    - For shippers that choose to use the “safer” option of the Cape of Good Hope, then cargo time delays can occur due to the longer sailing times involved. However, this routing is now fully part of existing logistics networks and will be further enhanced by the new Gemini route option becoming operational in 2025.
    - The Suez Canal means unpredictability and possible threats of last minute sailing changes and concerns over attacks on the vessels.
    - The current timescales for and end to issues in sailing through the Red Sea and Suez Canal are unknown.
    - Ultimately, there is an increased cost of shipping goods and this will be passed to the end consumer.
    - The Red Sea ceasefire in January 2025 is good news, but it would seem unlikely that this will result in a return to the Suez Canal for all vessels. It is expected that shipping lines will continue to monitor the situation at least for another 6-month period.

Route Options for Ocean Carriers & Shippers

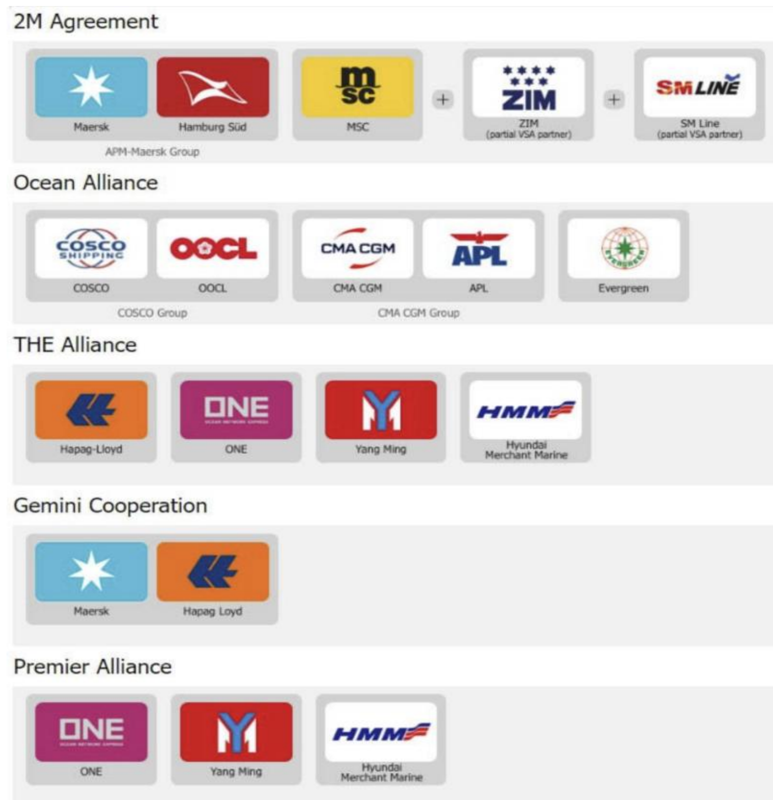
Shipping Lines Perspective – avoiding Suez Canal transit	An “Alternative” View
▪ Great Public Relations – avoiding “war zone” to protect everyone’s goods.	▪ Shipping lines need to utilise “spare” tonnage.
▪ Save $‘000s (c.$0.5 million) by not transiting the Suez Canal – off-set with some additional fuel costs etc. ($1 million) of longer transit.	▪ Tankers and bulkers are still transiting the Canal.
▪ Able to use more “spare” tonnage that lines have created with latest round of newbuild purchases on the back of big profits.	▪ Geo-politically not acceptable to continue avoiding Red Sea due loss of Trade in region.
▪ Charge additional surcharges for additional emissions and/or peak surcharges (PSSs) – extra revenue.	▪ Surcharges and higher spot rates will all contribute to additional revenues.
▪ Artificially reduce available capacity.	▪ Rate increase in time for Chinese New Year expected surge in demand.
▪ Increase sea freights on spot markets.	▪ CMA CGM have continued to use the Suez Canal for Levant services, but these are “one off” changes to services
▪ Possibility of extra calls in South African ports to “top up” volumes to Europe and to bunker.	

System Shocks – New Container Shipping Alliances

From 2M to Gemini - in January 2023, the world's two largest container shipping lines, MSC and Maersk Line, announced that their 2M Alliance would be terminated from 2025. Now 'Gemini' is to be formed - the main change is a move towards hub and spoke transshipment operations, rather than as many direct port calls

- In January 2023, the world's two largest container shipping companies, Maersk and MSC, announced that they would not be renewing their alliance come the end of their 10-year vessel sharing 2M agreement in 2025.
- A new alliance has formed from former 2M alliance partner Maersk, and leading German carrier Hapag-Lloyd. The Gemini Cooperation will initiate at the end of January 2025, comprising of a fleet of 290 vessels of 3.4million TEU. Maersk will provide 60% of the fleet, and Hapag-Lloyd the remaining 40%.
- The formation of this new alliance means the end of a new one, with Hapag-Lloyd leaving THE Alliance, at the beginning of 2025. THE Alliance members of Ocean Network Express, HMM and Yang Ming need to fill the gap Hapag-Lloyd has left.
- In terms of filling the Hapag-Lloyd gap, the Premier Alliance was announced on 9th September 2024, with Wan Hai joining THE Alliance from February 2025 and the new branding starting at this time.
- This confirms the view that no line is yet big enough to fill the ULCS units alone, MSC has formed a VSA with the Premier Alliance, allowing the latter to further ensure that Hapag-Lloyd lost volumes are covered with some MSC volumes and for MSC to have the support of the Premier Alliance to ensure that its ULCS ships can be filled sufficiently to take advantage of the economies of scale.
- Further port rotations will likely be refined, although fundamentally the global locations of demand will still need to be served, regardless of by which shipping line and on which service.

Alliance Group Transition – 2024 to 2025



2025 – Major Changes

Houthi ceasefire unlikely to have impact on vessel rotations for some time

- Houthi's temporary ceasefire on non-Israeli shipping
- Saudi Canal Authority insistence that the Suez Canal is now safe.
- CMA CGM test Suez Canal route again but have already used during the "troubles" for cargo to Lebanon (BEX service).
- Shippers remain unsure about safety of Suez route, but in the new year contract discussions have started to negotiate two tier contracts – one for Suez transit and one for Cape of Good Hope route.
- New Alliance structure has already caused disruption to shipping line services.
- Shipping lines are expected to continue to route Asia cargo via Cape of Good Hope for the short-term:

I. Safety remains a concern.

II. Already made changes to schedules and don't want to change again.

III. The service via Cape has led to increased profits that they want to maintain.

- New US import tariffs will impact trade especially with Canada, Mexico and China (next slide)

Houthi's Temporary Ceasefire

2025 – Major Changes

US import tariffs are expected to impact services especially from China to USA, but are unlikely to impact any services to Europe / Baltic Sea

- President Trump is re-elected.
- New US import tariffs will impact trade especially with Canada, Mexico and China.
- December 2024 was a strong end of year for FE-Europe trade, with a total year in 2024 of 18.3m TEU, including 1.7m TEU of imports from Asia, a y-o-y increase of 10.4%. Total volumes up 11.9% on 2023.
- It will be crucial to observe how US tariff increases will influence global trade in Q1.
- The suggestion is that:

I. The Chinese economy has already been stagnating and the tariff change will not have much impact on Europe/Black Sea trade.

II. There has been increased growth from India, Vietnam, South Korea, Thailand and Japan to cover Chinese stagnation.

III. Although vessel services may cease to offer as many Chinese calls to Europe they will still offer them.

IV. Additional potential calls are likely from the above countries with strong growth, meaning vessels will continue to arrive full in Europe and The Black Sea.

New President of USA – Donald Trump

Black Sea Potential Links with Central Asia

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There are potentially strong links from ports in Georgia such as APMT Poti, with major economies in Central Asia.

Macro-Economic Review – Central Asia

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Economic development in Georgia and key transit hinterland markets is a key influencer of trade potential

Key Conclusions	Implications for Georgian Port
Uzbekistan	
Positive economic trends, growth in GDP and population. Large producer of coal and crude oil. Tashkent City largest area of activity (20% share).	Opportunity for cargo imports and exports – demand is driven by gas, oil, cotton and gold which could be a prospect for Georgian ports. However, there is extremely high political uncertainty which remains a threat to the economy
Turkmenistan	
GDP growth driven by natural gas exports – but economic diversity planned.	I/E Demand is driven by mineral products with aspects of textiles, chemical products and plastic/rubber, some moves to diversify the external trade beyond hydrocarbons
Azerbaijan	
Population growing, GDP supported by mining and quarrying. Baku City accounts for 71% of country activity.	I/E Demand is heavily dependent on mineral products with some vegetable product exports, growth will be dependent on oil prices and the renewed conflict with Armenia
Armenia	
Small population, lack of GDP growth – reliant on industrial production. Key location is Yerevan with 70% of activity.	Low potential for cargo imports and exports – demand is driven by food production, metal mining and tobacco production, long term prospects depend on the government investment
Kazakhstan:	
Dominant economy in Central Asia – growing population & GDP. Producer of coal, oil, ores and gas. Around 33% of all economic activity in two locations, including Almaty City.	High potential for I/E – demand is driven by oil and gas production with other potential with regards to metallurgy and metal ore mining

Hinterland Analysis – Central Asia

Economic development in Georgia and key transit hinterland markets is a key influencer of trade potential

- **Georgia**
  - Southern areas are important economically while offering road and rail links into markets such as Armenia and Azerbaijan – Tbilisi generates 51% of GDP.
  - Georgian ports have good potential to serve a wide range of different industries in the immediate Caucasus region
- **Kazakhstan:**
  - High level of known reserves of oil, gas and metals stimulating past economic growth – regional GDP spread amongst a high number of small areas, Almaty City accounts for 20% of GDP. Has 4 rail corridors and 4 major highways as well as 2 main ports are located on the Caspian Sea.
- **Uzbekistan:**
  - Highest population of Central Asian republics with privatisation remains a key part of economic development with Tashkent City and Tashkent provinces remain key areas to serve
- **Armenia:**
  - Economic liberalisation and joining WTO helped to establish economy – but lack of development, Yerevan generates 54% of GDP. Limited rail facilities/no sea ports but road access to ports in Georgia already exists.

Caspian Sea Links include Port of Baku and Aktau

- **Azerbaijan:**
  - Continued economic reforms drive economy, production and export of oil and gas mainstay of development. Baku City remains the hub of economic activity in the country accounting for 68% of regional GDP.
- **Turkmenistan:**
  - Substantial gas and oil reserves continue to drive economy with the government seeking to diversify outlets for gas, developing new pipelines. Established road and rail network in place but no international sea port

Black Sea Potential Links with Central Asia

Built-Up Cost exercise suggest strong primary and secondary hinterland potential for Georgian ports

Shipping Costs to/from Major Markets → Stevedoring/Port Dues → Road / Rail Transport → **Cost Conclusions**

- There exist a number of different potential gateways for Central Asia, including ports in Russia, Georgia, South Turkey, Iran and Latvia.
- The majority of options reviewed include the cost of a Black Sea feeder vessel via a Mediterranean t/s hub from ULCSs to get to the ports shown, rather than direct calls offered at Mersin and Bandar Abbas.
- The inland aspect of the cost remains the most significant, although ports that can handle larger vessels and have cheaper THC's may also help to attract cargo to Central Asian destinations.
- Georgian ports are competitive for Tbilisi, Tashkent and Mary as a primary hinterland and Baku, Dushanbe and Yerevan as a secondary hinterland.
- The cost distinction is largely a result of the geographical position of the port in relation to the final destination or origin of the cargo.
- In some cases, a higher THC or deep-sea cost has an impact when reviewing total costs that are of a similar magnitude.
- Totals recorded are subject to change depending on fuel price, charter price and sizes of vessels deployed.

Total Comparative Cost Option Scenario's ex Far East - US$ per FEU

Port/ Dest'n	Almaty	Ashgabat	Astana	Baku	Bishkek	Dushanbe	Samarkand	Tbilisi	Turkmenbasy	Yerevan	Tashkent	Mary
	Kazakhstan	Turkmenistan	Kazakhstan	Azerbaijan	Krygyzstan	Tajikistan	Uzkekistan	Georgia	Turkmenistan	Armenia	Uzbekistan	Turkmenistan
Georgian Port	7999	5800	6567	2217	7753	6646	6276	1443	6767	1630	4267	4242
Novoro.	7874	7274	6521	3433	7628	7013	6398	1489	6713	2276	4638	7196
St.Pete	8344	8606	6499	6858	7975	8467	7852	6014	7868	5199	9836	9978
Yarimca	14640	5287	12002	1861	11532	11029	12449	X	3575	2068	8624	4412
Izmit	14880	6169	11935	3517	11482	11013	12384	2055	4142	2065	8587	4979
B.Abbas	6146	4051	7253	3808	5776	5038	4300	X	4808	X	X	X
Mersin	8053	5854	8545	3644	7807	6823	7082	2083	6523	1575	7044	6124
Riga	5958	8059	4621	5213	8854	8922	4823	2282	5430	4797	6934	6161

Future Outlook for the Black Sea Region

1. Global economy is slowly stabilizing from recent system shock – The Pandemic, Ukraine War, Red Sea Crisis etc.

2. Less reliance on China is likely to mean growing opportunities for trade for Black Sea with growing economies of India, Vietnam, South Korea, Japan and Thailand etc. First signs of deglobalisation?

3. Services from the FE may stop at additional ports in West Black Sea, "IF" the Suez route is reinstated to ensure that vessel capacity and "spare" tonnage fully utilised – shipping lines are expected to delay this for as long as possible

4. Location of Georgian ports lends itself to transit volume potential for the Central Asian Market, especially Uzbekistan, Turkmenistan, Tajikistan, Azerbaijan and Armenia

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