

Ukraine Supply Wisdom[®] Report

03-May-2022



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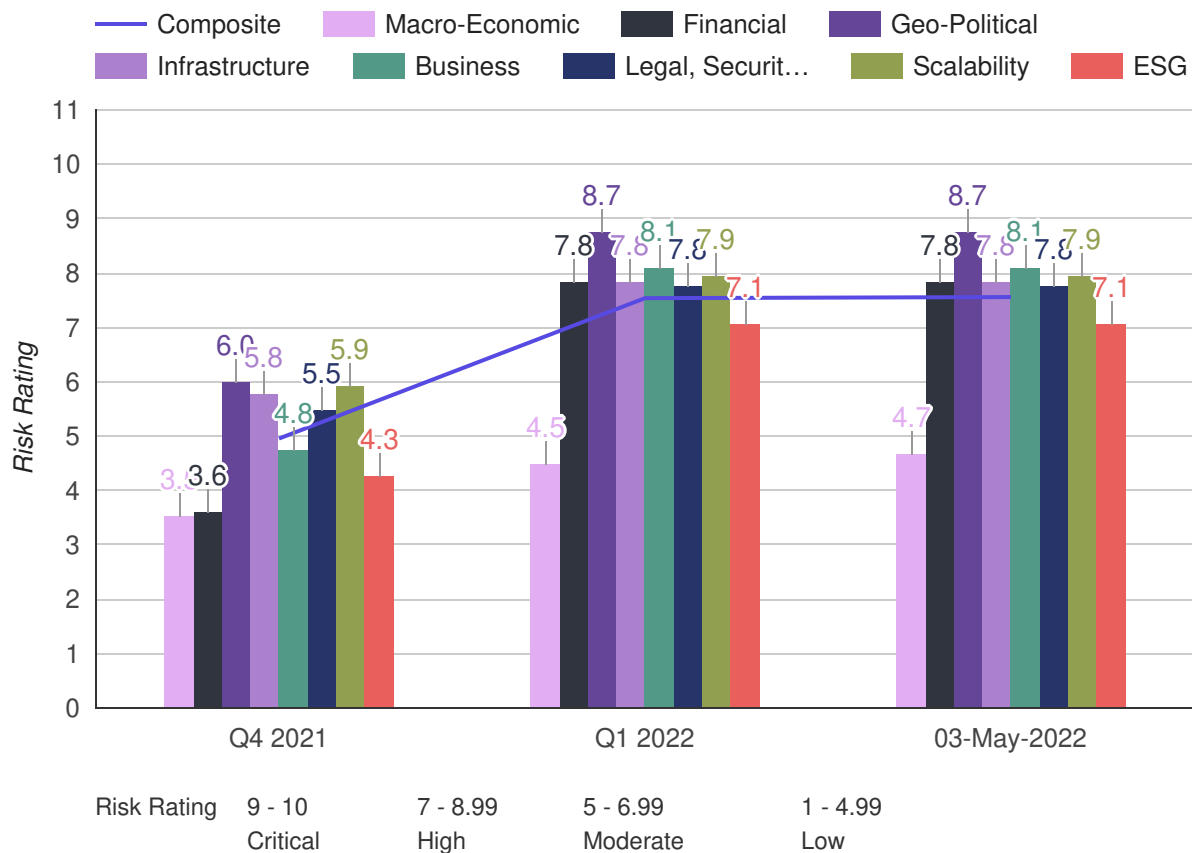
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Executive Summary

Risk Snapshot



Target Name	Ukraine
Info Last Updated on	03-May-2022
Capital	Kyiv
Population	43.7 million
Cybercrime - Country Rank	Catastrophic Event
Labor Force	Catastrophic Event
Corporate Income Tax	18%
Travel Advisory	Avoid All Travel
CO2 emissions (metric tons per capita)	Catastrophic Event
Cost of Living Index	Catastrophic Event

Risk Rating	Q4 2021		Q1 2022		03-May-2022
Composite	4.96	↑	7.54	↑	7.56
By Domain:					
Macro-Economic	3.52	↑	4.48	↑	4.68
Financial	3.60	↑	7.82	−	7.82
Geo-Political	5.99	↑	8.74	−	8.74
Infrastructure	5.79	↑	7.85	−	7.85
Business	4.76	↑	8.10	−	8.10
Legal, Security and Compliance	5.48	↑	7.76	−	7.76
Scalability	5.93	↑	7.94	−	7.94
ESG	4.25	↑	7.08	−	7.08

Impact Level

■ Critical

■ High

■ Moderate

■ Low

Trends - Q1 2022

- Multiple cyber attacks witnessed
- Multiple instances of terror threat/attack witnessed
- Multiple instances of strikes/protests/riots witnessed
- Multiple geo-political trends witnessed
- Multiple instances of sanctions witnessed

Key Highlights

Key Highlights:

*Scores for Q1 2022 have been updated to reflect the catastrophic events caused by the current war

- Ukraine is located in Eastern Europe and shares its boundary with Russia, Belarus, Poland, Slovakia, Hungary, Romania, and Moldova
- It is the poorest country in Europe alongside Moldova, suffering from a very high poverty rate as well as severe corruption
- On February 24, 2022, the Russian President officially declared war against the country, in an escalation of the Russia-Ukrainian War that began in 2014
- The invasion is the largest conventional military attack on a European sovereign state since World War II (WWII)
- Ukraine's economy is expected to shrink by an estimated 45.1% in 2022, although the magnitude of the contraction will depend on the duration and intensity of the war
- More than 5.3 million Ukrainians left the country and a quarter of the population are displaced due to the ongoing conflict
- Several nations, including the US, UK, and EU came in support of Ukraine and announced financial and military aid

Macro-Economic

Risk Level - Low

- Ukraine's economy is expected to be severely impacted by the conflict
- The IMF predicts the country's economy to contract by up to 45% in 2022
- The annual inflation rate in Ukraine accelerated to 13.7% in March 2022 from 10.7% in the previous month, the highest since February 2018
- The interest rates in Ukraine remained unchanged at 10%
- Foreign Exchange Reserves in Ukraine increased to US\$28,100 M in March 2022 from US\$27,500 M in February 2022
- The war has made economic activity impossible in large parts of the country, disrupting farming and harvest operations

Financial

Risk Level - High

- Amid political tensions between Ukraine and Russia, the financial stability of the country is at risk
- Fuel and Power cost stood at US\$1.13 per liter and US\$0.08 Kwh, respectively
- Corporate income tax, social security contributions tax, property tax, and VST/GST stood at 18%, 22%, 12%, and 20%, respectively

Geo-Political

Risk Level - High

- Following are the recent developments with respect to political tensions between Ukraine and Russia:
 - April 26, 2022: Russian shelling took place in Ukraine's eastern region of Donetsk
 - April 23, 2022: Shelling in all the Ukrainian-controlled cities in the eastern region of Luhansk was intensified by Russian forces
 - April 22, 2022: Russian President directed his forces to seal off the Azovstal plant
 - April 21, 2022: reported a series of explosions in the Donetsk region, with shelling taking place in Marinka, Slavyansk, and Kramatorsk
 - April 19, 2022; Russian forces seized the city of Kreminna in eastern Ukraine
 - April 03, 2022: Ukraine's President Volodymyr Zelenskyy stated that the country will conduct a probe into alleged war crimes against civilians by Russian troops
 - March 13, 2022: Ukraine's government accused the Russian military of abducting another mayor in Dniprorudne
 - March 13, 2022: Russian military launched an air strike targeting a Ukrainian military base in Yavoriv killing 35 and injuring at least 134 people
 - March 11, 2022: Ukraine's President Volodymyr Zelenskyy accused Russia of kidnapping the mayor of the city of Melitopol
 - March 07, 2022: Russia declared ceasefire in the areas of Kyiv, Mariupol, Kharkiv, and Sumy to allow for evacuations from 7:00 am GMT
 - February 24, 2022: Military operations were launched by Russia
 - February 24, 2022: Ukrainian President imposed Martial law for 30 days after Russia declared war
- Since March 2014, Ukraine has a border dispute with Russia over the status of Crimea and of the city of Sevastopol
- Terror threat is present due to heavy militarized activities by Russia near the Ukrainian borders
- Volodymyr Zelensky sworn in as President of Ukraine on May 19, 2019
- Corruption rank remains at 122
- Travel advisory of 'Avoid All Travel' present
- US issued a level 4 travel advisory asking its citizens to avoid travel to Ukraine

- British nationals in Ukraine are asked to leave immediately amid possible threat from Russia
- On October 25, 2021, the Centers for Disease Control and Prevention (CDC) had issued a Level 4 Travel Health Notice for Ukraine due to COVID-19, indicating a high level of COVID-19 in the country
- Multiple protests witnessed over the last three months:
 - Mar 2022: Protests by hundreds over illegal occupation by Russia in Ukraine's Kherson oblast
 - Feb 16, 2022: Several thousand Ukrainians rallied in Kyiv to show unity amid fears of a Russian invasion
 - Feb 06, 2022: Thousands rallied over possible military offensive from Russia

Infrastructure

Risk Level - High

- Infrastructure across the country has been damaged due to the military attacks and explosions by Russia
- The World Bank states physical damage to Ukraine's infrastructure from Russia's invasion has reached roughly US\$60 B and will rise further as the war continues
- As of March 24, 2022, at least 4,431 residential buildings, 92 factories and warehouses, 378 institutions of secondary and higher education, 138 health care institutions, 12 airports, seven thermal power plants and hydroelectric power plants have been damaged, destroyed or seized
- Average internet speed is 66.5Mbps

Business

Risk Level - High

- Businesses have been severely impacted due to the military operations by Russia
- The war has caused supply chain disruptions, economic sanctions, and even displaced workforce
- The conflict sparked a massive refugee crisis, with over five million Ukrainians fleeing their country

Legal, Security and Compliance

Risk Level - High

- Multiple cyber-attacks have been reported on government websites and banks during ongoing tensions between Ukraine and Russia
- In February 2022, a distributed denial-of-service (DDoS) attack was reported on Ukraine's defence ministry and two national banks
- During the same month, a cyberattack on Ukrainian government websites resulted in some websites being inaccessible
- The cyberattack hit the Foreign Ministry, the Cabinet of Ministers, and the Security and Defense Council among others
- Total number of patents issued: 2,179

Scalability

Risk Level - High

- Amid political tensions between Ukraine and Russia, the scalability of the country is at risk
- The Russian invasion of Ukraine has already had a major impact on industries such as energy, commodities markets and IT among others

ESG

Risk Level - High

- On December 18, 2021, Ukraine reported its first case of COVID-19 Variant 'Omicron'
- As of April 27, 2022, the country reported 4,999,172 confirmed COVID-19 cases with 108,343 deaths, ~2.16% of total reported cases. In total, 15,153,577 people have received vaccine doses against COVID-19, ~36.2% of the total population

**Note - Supply Wisdom's analysis is based on information available from multiple sources in the public domain.*

Most Recent Alerts

Critical May 03, 2022 Update 173: Ukraine - Rocket Strike Witnessed - One Death Reported and Several Injured	Critical May 01, 2022 Update 172: Ukraine - Multiple Airstrikes Witnessed - Eight Deaths Reported	Critical May 01, 2022 Update 171: Ukraine - Cyber Attack Reported on Multiple Websites	Critical Apr 29, 2022 Update 168: Kyiv, Ukraine - Missile Attacks Reported - Dozen Injured	Critical Apr 28, 2022 Update 167: Kherson, Ukraine - Multiple Explosions Reported - Four Injured
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Critical - Alerts

- Critical** May 03, 2022
Update 173: Ukraine - Rocket Strike Witnessed - One Death Reported and Several Injured
- Critical** May 01, 2022
Update 172: Ukraine - Multiple Airstrikes Witnessed - Eight Deaths Reported
- Critical** May 01, 2022
Update 171: Ukraine - Cyber Attack Reported on Multiple Websites
- Critical** Apr 29, 2022
Update 168: Kyiv, Ukraine - Missile Attacks Reported - Dozen Injured
- Critical** Apr 28, 2022
Update 167: Kherson, Ukraine - Multiple Explosions Reported - Four Injured

High - Alerts

- High** Apr 21, 2022
Credit Suisse - Net Loss Warning Issued for Q1 2022 over Russia-Ukraine Crisis and Litigation Charges
- High** Apr 11, 2022
Update 121: Ukraine - GDP Forecasted to Contract by 45.1% in 2022 Due to Russian Invasion
- High** Apr 03, 2022
Update 95: Ukraine - Economic Contraction Predicted Due to Russian Invasion - 40% YoY
- High** Feb 19, 2022
Update 2: Eastern Ukraine - Evacuation Planned by Pro-Russian Separatists
- High** Feb 17, 2022
Update 1: Russia - Parliament Votes to Recognize Ukraine's Donetsk and Luhansk Regions as Independent

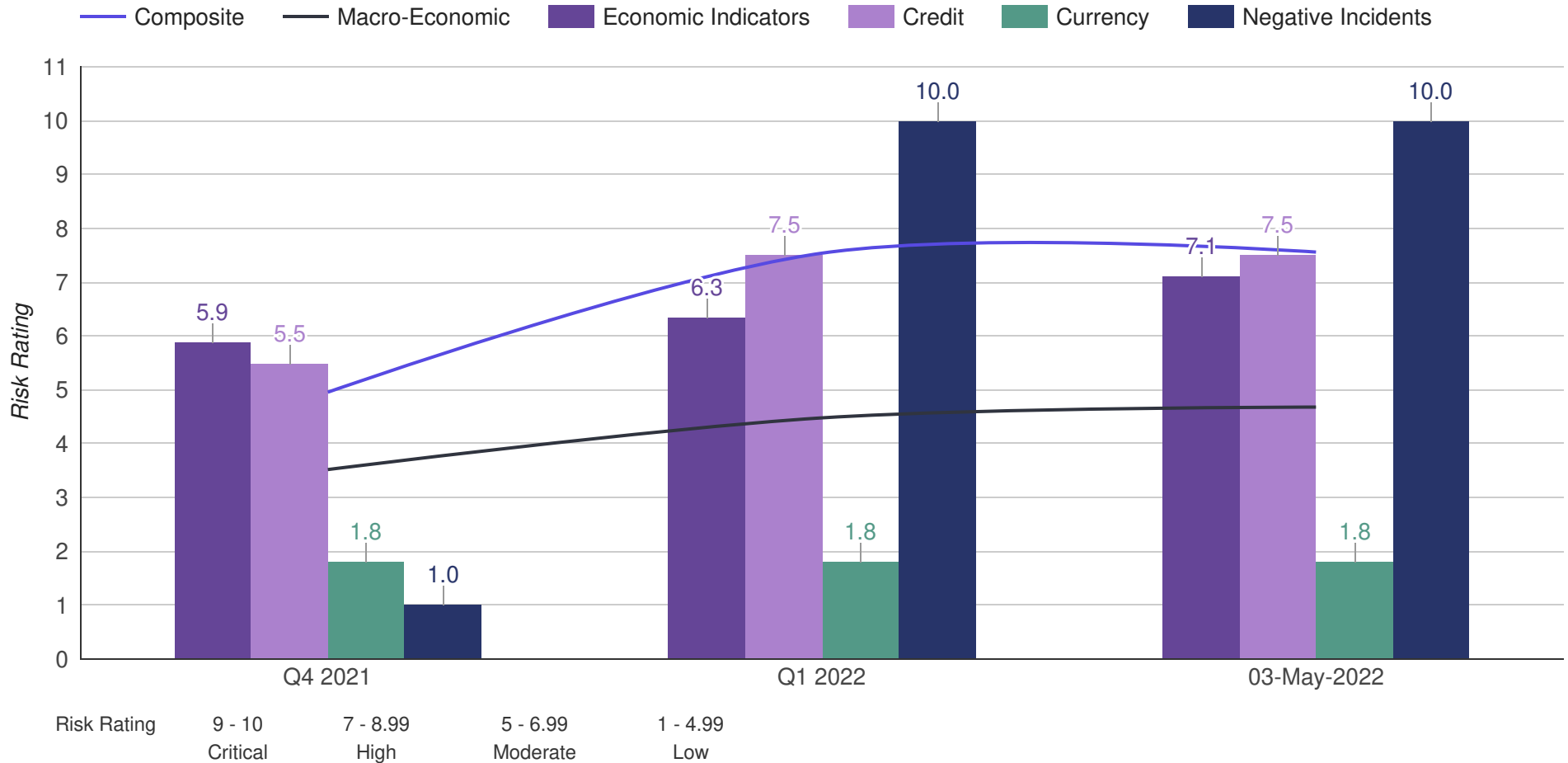
Moderate - Alerts

- Moderate** Dec 03, 2021
Update 57: Ukraine - COVID-19 Variant 'Omicron' Concern Results in Entry Restrictions for Eight African Countries
- Moderate** Nov 26, 2021
Ukraine - Polio Emergency Announced Amid Surge in COVID-19 Cases
- Moderate** Nov 10, 2021
Update 56: Ukraine - Reports Rise in Daily COVID-19 Deaths
- Moderate** Oct 23, 2021
Update 55: Ukraine - Reports 23,785 New COVID-19 Cases in Last 24 Hours, National Total Raises to 2,748,614

Low - Alerts

- Low** Feb 13, 2022
Kyiv, Ukraine - Thousands Rally over Possible Military Offensive from Russia
- Low** Feb 06, 2022
Kharkiv, Ukraine - Thousands Rally over Possible Military Offensive from Russia
- Low** Nov 26, 2021
Kyiv, Ukraine - Protest Against COVID-19 Vaccine Mandate and Restrictions
- Low** Nov 05, 2021
Ukraine - Protests Against Russian President over Violation of Ukrainian Sovereignty
- Low** Oct 15, 2021
Ukraine - Thousands Protest over Peace Deal on Separatist Areas

Macro-Economic Update



Most Recent Macro-Economic Alerts

<p>Critical Apr 15, 2022</p> <p>Update 133: Russia - Warning Issued by Moody's over Default - Accused of Committing War Crimes</p>	<p>High Apr 11, 2022</p> <p>Update 121: Ukraine - GDP Forecasted to Contract by 45.1% in 2022 Due to Russian Invasion</p>	<p>High Apr 03, 2022</p> <p>Update 95: Ukraine - Economic Contraction Predicted Due to Russian Invasion - 40% YoY</p>	<p>Critical Mar 16, 2022</p> <p>Update 44: Russia - Rating of Banks Downgraded by Fitch - Additional Sanctions Imposed by US and UK</p>	<p>Critical Mar 01, 2022</p> <p>Update 18: Ukraine - Russian Convoy Nears Kyiv - Missile Explosion Reported</p>
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Critical - Alerts

- Critical** Apr 15, 2022

Update 133: Russia - Warning Issued by Moody's over Default - Accused of Committing War Crimes
- Critical** Mar 16, 2022

Update 44: Russia - Rating of Banks Downgraded by Fitch - Additional Sanctions Imposed by US and UK
- Critical** Mar 01, 2022

Update 18: Ukraine - Russian Convoy Nears Kyiv - Missile Explosion Reported
- Critical** Mar 01, 2022

Update 17: Ukraine - Cyber Attack Reported on Government Website - Blasts Continues in Kyiv
- Critical** Feb 28, 2022

Update 16: Ukraine - Russian Forces Seized Two Cities - Rocket Strikes Reported

High - Alerts

- High** Apr 11, 2022

Update 121: Ukraine - GDP Forecasted to Contract by 45.1% in 2022 Due to Russian Invasion
- High** Apr 03, 2022

Update 95: Ukraine - Economic Contraction Predicted Due to Russian Invasion - 40% YoY

Moderate - Alerts

No Moderate Macro-Economic alerts issued for the time period covered by this report

Low - Alerts

No Low Macro-Economic alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Economic Indicators	Risk Rating	5.89	6.33	7.12	+0.79	
GDP Growth Rate	%	2.70%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
GDP Contribution from the Services Sector	%	60%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Debt to GDP Ratio for Country	%	60.80%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Fiscal Balance (% of GDP)	%	-1.50%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Trade Balance (Per Capita)	US\$	\$-7.15	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Inflation Rate	%	10.30%	10%	13.70%	+3.70%	High Risk - See Macro-Economic Implications section below
Unemployment Rate	%	9.20%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Interest Rates	%	9%	10%	10%	0%	
FDI In-flow (% of GDP)	%	3.80%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Stock Market Performance (Within the Month)	%	0.09%	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Credit	Risk Rating	5.50	7.50	7.50	0.00	
Credit Exposure	Qualitative	Moderate	High	High	No	High Risk - See Macro-Economic Implications section below
OECD Rating	Rating	6.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Macro-Economic Implications section below
Currency	Risk Rating	1.80	1.80	1.80	0.00	
Forex Rate Fluctuation	%	2.19%	2.19%	2.89%	+0.70%	
Forex Reserves	US\$ B	\$30.50	\$30.50	\$28.10	\$-2.40	Critical Risk - See Macro-Economic Implications section below
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Macro-Economic Implications section below

** Refer latest alerts under "Macro-Economic" category

Analysts Comment(s)

Amid political tensions between Ukraine and Russia, economic stability of the country is at risk. Ukraine's economy is expected to shrink by an estimated 45.1 % in 2022, although the magnitude of the contraction will depend on the duration and intensity of the war.

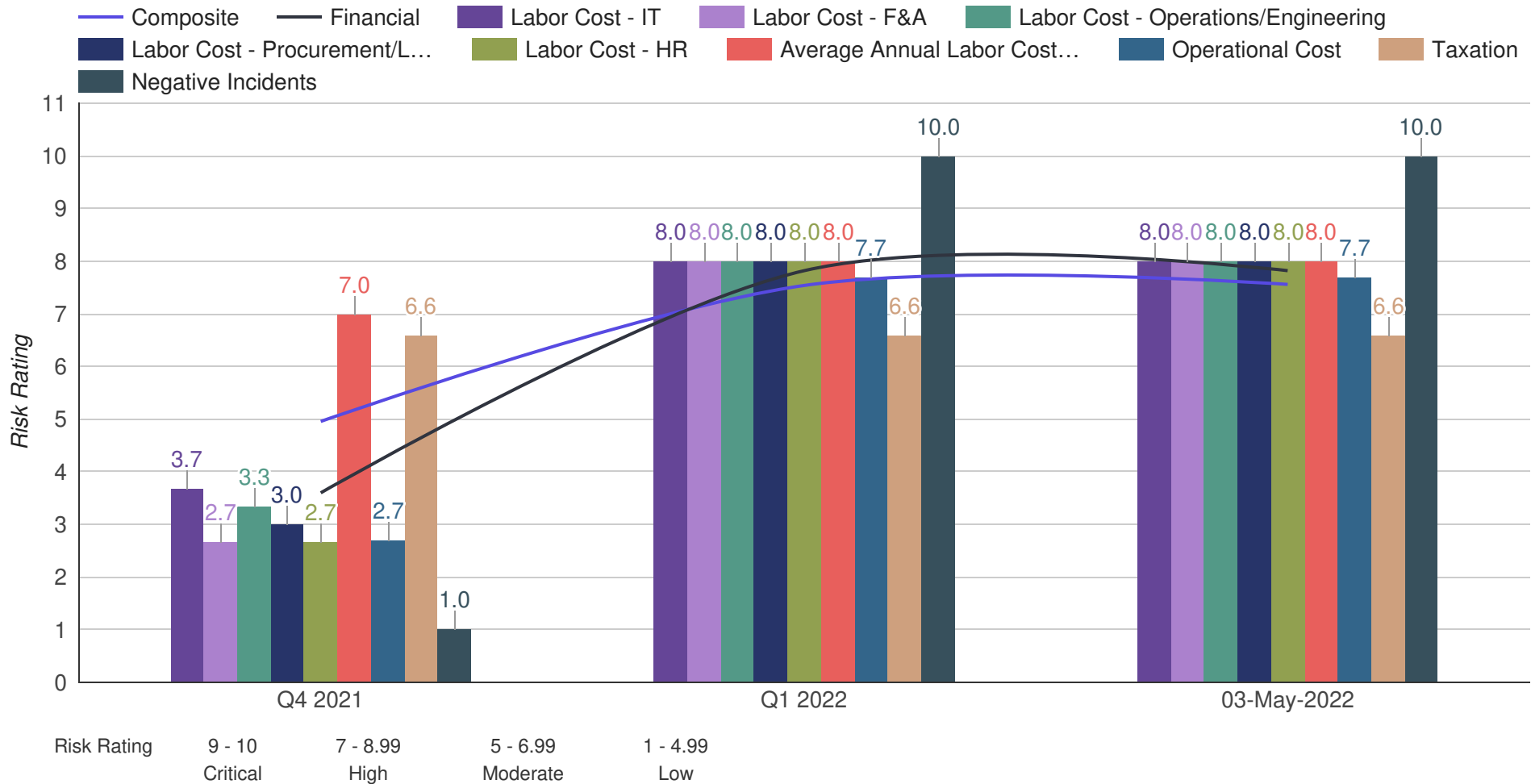
Macro-Economic Implications

- **GDP Growth Rate:** GDP is an essential measurement for economists and investors because it represents economic production and growth. When the economy is healthy, there is usually a lower level of unemployment, and wages tend to increase as businesses hire more labor to meet the economy's growing demand. Conversely, if there is negative GDP growth, it may indicate an economy in or approaching a recession or an economic downturn.
- **GDP Contribution from the Services Sector:** Though classified as the third economic sector, the service sector is responsible for the most significant portion of the global economy's business activity. A low contribution from Services Sector indicates that the country or the government is not highly focused on providing or improving their services vertical. The focus of the country is more on industry or agricultural activities.
- **Debt to GDP Ratio for Country:** A high debt-to-GDP ratio is undesirable for a country, as a higher ratio indicates a higher risk of default. When a country has a manageable debt-to-GDP ratio, investors are more eager to invest, and it doesn't have to offer as high of yields on its bonds.
- **Fiscal Balance (% of GDP):** A government experiences a fiscal deficit when it spends more money than it takes in from taxes and other revenues excluding debt over some time. This gap between income and spending is subsequently closed by government borrowing, increasing the national debt. An increase in the fiscal deficit, in theory, can boost a sluggish economy by giving more money to people who can then buy and invest more. Long-term deficits, however, can be detrimental to economic growth and stability.
- **Trade Balance (Per Capita):** A trade deficit or low trade balance indicates that the country lacks efficient capacity to produce its products, whether due to lack of skill and resources to create that capacity or due to preference to acquire from another country (such as to specialize in its goods, for lower cost or to acquire luxuries).
- **Inflation Rate:** Rising prices, known as inflation, impact the cost of living, the cost of doing business, borrowing money, mortgages, corporate, and government bond yields, and every other facet of a country's economy. A high inflation rate can lead to increased borrowing costs, put additional pressure on the government to increase state pension or other unemployment benefits, and increase pay claims.
- **Unemployment Rate:** High unemployment indicates the economy is operating below full capacity and is inefficient, that can lead to lower output and incomes. The unemployed are also unable to purchase many goods, and hence, will contribute to lower spending and lower output. A rise in unemployment can cause a negative multiplier effect. Areas of high unemployment (especially youth unemployment) tend to have more crime and vandalism. It can lead to alienation and difficulties in integrating young unemployed people into society.
- **FDI In-flow (% of GDP):** Foreign direct investment (FDI) is a key ingredient of successful economic growth that brings significant benefits by creating high-quality jobs and introducing modern production and management practices. Low FDI in-flow may hinder the means of financing the construction of

new infrastructure and the creation of jobs for a country's local workers.

- **Stock Market Performance (Within the Month):** Poor stock performance indicates that the economy is not doing as well and spending recedes. Stock market losses cause wealth erosion in both personal and retirement portfolios.
- **Credit Exposure:** Investors use credit exposure as a way to assess the riskiness of a particular country's bonds. It can give investors insights into the level of risk associated with investing in the debt of a particular country, including any political risk. A country with low credit exposure can access funds easily from the international bond market and also secure foreign direct investment. However, a high credit exposure means that a country faces a high risk of default and may have experienced difficulties in paying back debts.
- **OECD Rating:** Investors use credit ratings as a way to assess the riskiness of a particular country's bonds. It can give investors insights into the level of risk associated with investing in the debt of a particular country, including any political risk. Many countries seek ratings from the largest and most prominent credit rating agencies to encourage investor confidence. A country with high credit ratings can access funds easily from the international bond market and also secure foreign direct investment. However, a low credit rating means that a country faces a high risk of default and may have experienced difficulties in paying back debts.
- **Forex Reserves:** Low forex indicates that the country has a problem maintaining adequate liquidity in case of an economic crisis.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

Financial Update



Most Recent Financial Alerts

Critical Apr 01, 2022

Update 86: European Countries - Russia Demands Foreign Buyers to Pay in Roubles for Russian Gas, Effective April 01, 2022

Critical - Alerts

Critical Apr 01, 2022

Update 86: European Countries - Russia Demands Foreign Buyers to Pay in Roubles for Russian Gas, Effective April 01, 2022

High - Alerts

No High Financial alerts issued for the time period covered by this report

Moderate - Alerts

No Moderate Financial alerts issued for the time period covered by this report

Low - Alerts

No Low Financial alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Labor Cost - IT	Risk Rating	3.67	8.00	8.00	0.00	
Average Annual IT Entry Level Salary	US\$	\$11,700.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual IT Team Lead Level Salary	US\$	\$19,500.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual IT Manager Level Salary	US\$	\$26,000.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Labor Cost - F&A	Risk Rating	2.67	8.00	8.00	0.00	
Average Annual F&A Entry Level Salary	US\$	\$5,200.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual F&A Team Lead Level Salary	US\$	\$11,100.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual F&A Manager Level Salary	US\$	\$19,700.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Labor Cost - Operations/Engineering	Risk Rating	3.33	8.00	8.00	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Average Annual Operations/Engineering Entry Level Salary	US\$	\$7,300.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual Operations/Engineering Team Lead Level Salary	US\$	\$12,500.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual Operations/Engineering Manager Level Salary	US\$	\$21,800.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Labor Cost - Procurement/Logistics	Risk Rating	3.00	8.00	8.00	0.00	
Average Annual Procurement/Logistics Entry Level Salary	US\$	\$4,400.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual Procurement/Logistics Team Lead Level Salary	US\$	\$10,400.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual Procurement/Logistics Manager Level Salary	US\$	\$21,200.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Labor Cost - HR	Risk Rating	2.67	8.00	8.00	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Average Annual HR Entry Level Salary	US\$	\$4,500.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual HR Team Lead Level Salary	US\$	\$9,900.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual HR Manager Level Salary	US\$	\$19,200.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Average Annual Labor Cost Growth Rate	Risk Rating	7.00	8.00	8.00	0.00	
Average Annual Labor Cost Growth Rate	%	13.90%	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Operational Cost	Risk Rating	2.69	7.70	7.70	0.00	
Rent (Grade 1 Commercial)	US\$/Sq. ft./Month	\$2.17	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Rental Growth	%	0%	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Cost to Start Business	%	0.50%	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Minimum Capital Required	%	0%	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Cost of Registering Property	%	1.70%	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Fuel Prices	US\$/Liter	\$1.11	\$1.11	\$1.13	+\$0.02	
Power Cost	US\$/Kwh	\$0.09	Catastrophic Event	Catastrophic Event	No	High Risk - See Financial Implications section below
Taxation	Risk Rating	6.60	6.60	6.60	0.00	
Corporate Income Tax	%	18%	18%	18%	0%	
Social Security Contributions Tax	%	22%	22%	22%	0%	High Risk - See Financial Implications section below
Property Tax	%	12%	12%	12%	0%	
VAT / GST	%	20%	20%	20%	0%	Critical Risk - See Financial Implications section below
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Financial Implications section below

*** Refer latest alerts under "Financial" category*

Analysts Comment(s)

Amid political tensions between Ukraine and Russia, the financial stability of the country is at risk.

Financial Implications

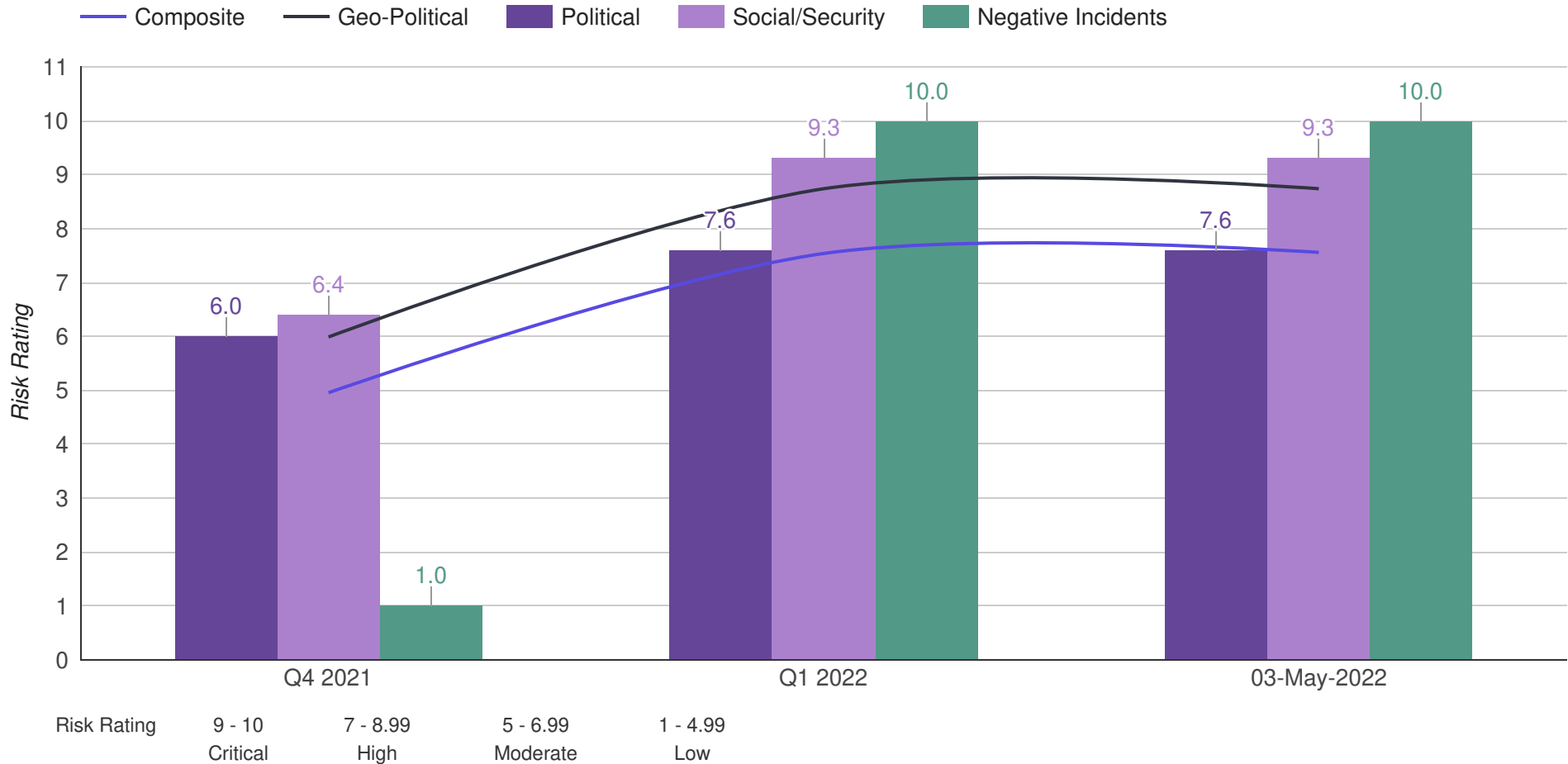
- Average Annual IT Entry Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- Average Annual IT Team Lead Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- Average Annual IT Manager Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- Average Annual F&A Entry Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- Average Annual F&A Team Lead Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- Average Annual F&A Manager Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs

increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.

- **Average Annual Operations/Engineering Entry Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- **Average Annual Operations/Engineering Team Lead Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
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- **Average Annual Procurement/Logistics Entry Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- **Average Annual Procurement/Logistics Team Lead Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- **Average Annual Procurement/Logistics Manager Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.

- **Average Annual HR Entry Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- **Average Annual HR Team Lead Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- **Average Annual HR Manager Level Salary:** The increase in labor cost may result in higher expenses compared to revenue. A rise in labor cost higher than the rise in labour productivity may be a threat to an economy's cost competitiveness, if other costs are not adjusted in compensation. Policies that increase labor costs can substantially affect both employment and hours, in individual companies as well as the overall economy. High labor costs increase end-product/services prices, and affect the export revenues (due to the reduction of its volume) and profits of the corporations.
- **Average Annual Labor Cost Growth Rate:** If the annual labor cost growth rate is low, then it will definitely impact the employee morale working in the location. Lower morale can negatively affect productivity, especially in the short run.
- **Rent (Grade 1 Commercial):** Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. Higher operational costs could increase end product/service prices and affect profits of corporations.
- **Rental Growth:** Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. Higher operational costs could increase end product/service prices and affect profits of corporations.
- **Cost to Start Business:** Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. Higher operational costs could increase end product/service prices and affect profits of corporations.
- **Minimum Capital Required:** Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. Higher operational costs could increase end product/service prices and affect profits of corporations.
- **Cost of Registering Property:** Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. Higher operational costs could increase end product/service prices and affect profits of corporations.
- **Power Cost:** Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. Higher operational costs could increase end product/service prices and affect profits of corporations.
- **Social Security Contributions Tax:** High taxes increase prices within the business and could lead to increase of end product/service prices and affect profits of corporations.
- **VAT / GST:** High taxes increase prices within the business and could lead to increase of end product/service prices and affect profits of corporations.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

Geo-Political Update



Most Recent Geo-Political Alerts

Critical May 03, 2022 Update 173: Ukraine - Rocket Strike Witnessed - One Death Reported and Several Injured	Critical May 01, 2022 Update 172: Ukraine - Multiple Airstrikes Witnessed - Eight Deaths Reported	Critical May 01, 2022 Update 171: Ukraine - Cyber Attack Reported on Multiple Websites	Critical Apr 29, 2022 Update 168: Kyiv, Ukraine - Missile Attacks Reported - Dozen Injured	Critical Apr 28, 2022 Update 167: Kherson, Ukraine - Multiple Explosions Reported - Four Injured
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Critical - Alerts

- Critical** **May 03, 2022**
Update 173: Ukraine - Rocket Strike Witnessed - One Death Reported and Several Injured
- Critical** **May 01, 2022**
Update 172: Ukraine - Multiple Airstrikes Witnessed - Eight Deaths Reported
- Critical** **May 01, 2022**
Update 171: Ukraine - Cyber Attack Reported on Multiple Websites
- Critical** **Apr 29, 2022**
Update 168: Kyiv, Ukraine - Missile Attacks Reported - Dozen Injured
- Critical** **Apr 28, 2022**
Update 167: Kherson, Ukraine - Multiple Explosions Reported - Four Injured

High - Alerts

- High** **Apr 21, 2022**
Credit Suisse - Net Loss Warning Issued for Q1 2022 over Russia-Ukraine Crisis and Litigation Charges
- High** **Apr 11, 2022**
Update 121: Ukraine - GDP Forecasted to Contract by 45.1% in 2022 Due to Russian Invasion
- High** **Feb 19, 2022**
Update 2: Eastern Ukraine - Evacuation Planned by Pro-Russian Separatists
- High** **Feb 17, 2022**
Update 1: Russia - Parliament Votes to Recognize Ukraine's Donetsk and Luhansk Regions as Independent
- High** **Feb 04, 2022**
Ukraine - Political Tensions Escalate Between Russia and Ukraine

Moderate - Alerts

No Moderate Geo-Political alerts issued for the time period covered by this report

Low - Alerts

- Low** **Feb 13, 2022**
Kyiv, Ukraine - Thousands Rally over Possible Military Offensive from Russia
- Low** **Feb 06, 2022**
Kharkiv, Ukraine - Thousands Rally over Possible Military Offensive from Russia
- Low** **Nov 26, 2021**
Kyiv, Ukraine - Protest Against COVID-19 Vaccine Mandate and Restrictions
- Low** **Nov 05, 2021**
Ukraine - Protests Against Russian President over Violation of Ukrainian Sovereignty
- Low** **Oct 15, 2021**
Ukraine - Thousands Protest over Peace Deal on Separatist Areas

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Political	Risk Rating	6.00	7.60	7.60	0.00	
Political Stability	EIU Rating		Catastrophic Event	Catastrophic Event	No	High Risk - See Geo-Political Implications section below
State of Democracy	Qualitative	Hybrid Regimes	Catastrophic Event	Catastrophic Event	No	High Risk - See Geo-Political Implications section below
Corruption Level	CPI Rank	117.00	122.00	122.00	0.00	High Risk - See Geo-Political Implications section below
Social/Security	Risk Rating	6.40	9.30	9.30	0.00	
Country Crime Index	Quantitative	45.90	Catastrophic Event	Catastrophic Event	No	High Risk - See Geo-Political Implications section below
Travel Advisory	Qualitative	Reconsider All Travel	Avoid All Travel	Avoid All Travel	No	Critical Risk - See Geo-Political Implications section below
Terror Attacks/Threats	Qualitative	No	Yes	Yes	No	Critical Risk - See Geo-Political Implications section below
Border Disputes	Qualitative	Yes	Yes	Yes	No	Critical Risk - See Geo-Political Implications section below
Social Unrest/Strikes	Qualitative	Yes	Yes	Yes	No	Critical Risk - See Geo-Political Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Geo-Political Implications section below

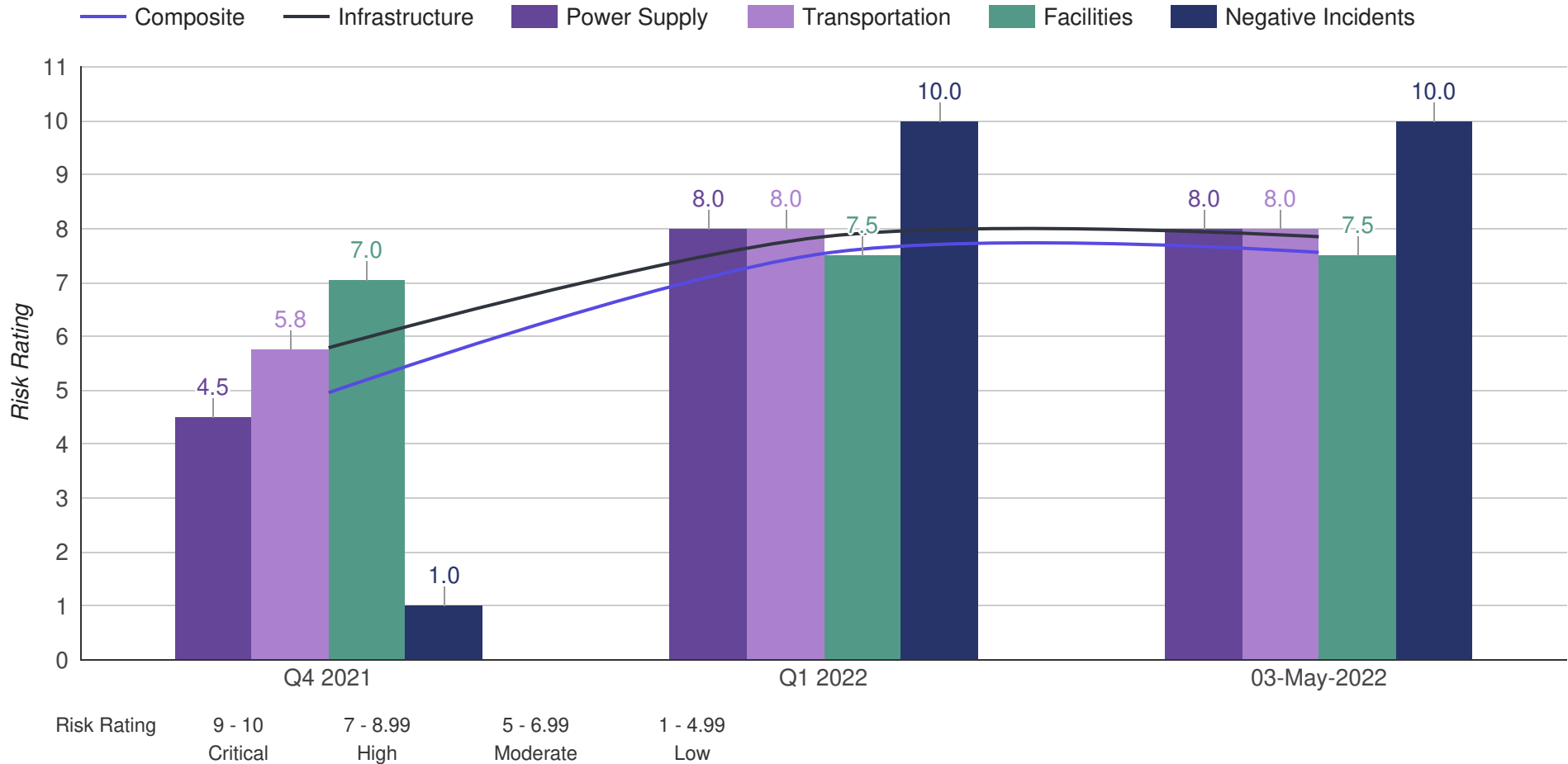
** Refer latest alerts under "Geo-Political" category

Geo-Political Implications

- Political Stability:** Economic growth and political stability are deeply interconnected. On the one hand, the uncertainty associated with an unstable political environment may reduce investment and the pace of economic development. On the other hand, poor economic performance may lead to government collapse and political unrest.
- State of Democracy:** Democracy is more than a set of specific government institutions; it encompasses values, attitudes, and practices which may take different forms among cultures and societies around the world. It has taken a number of forms, both in theory and practice. Some varieties of democracy provide better representation and more freedom for their citizens than others. However, if any democracy is not structured to prohibit the government from excluding the people from the legislative process, or any branch of government from altering the separation of powers in its favour, then a branch of the system can accumulate too much power and destroy the democracy.
- Corruption Level:** Countries that have a high level of corruption are unable to function efficiently or prosper at an economic level, causing suffering for society as a whole. It can lead to an uneven distribution of wealth as small businesses face unfair competition from large companies that have established illegal connections with government officials. In a corrupt economy, resources are inefficiently allocated and companies that otherwise would not be qualified to win government contracts are often awarded projects as a result of bribery or kickbacks. The quality of education and healthcare also deteriorates under a corrupt economy, leading to an overall lower standard of living for the country's citizens.
- Country Crime Index:** Economic growth and political stability are deeply interconnected. On the one hand, the uncertainty associated with an unstable political environment may reduce investment and the pace of economic development. On the other hand, poor economic performance may lead to government collapse and political unrest.
- Travel Advisory:** Presence of travel advisory could indicate that there are serious risks to safety and security for travelers. Travel advisories may also note parts of the world where a government does not have the ability to respond to the problems of citizens traveling.

- **Terror Attacks/Threats:** A high degree of social and security risks would lead to political instability in economic development. In such environments of latent ethnic violence, social unrest, or terror threats, business as usual is impossible as all levels of economic activity are impacted.
- **Border Disputes:** Border disputes often result from vague and unclear language in a treaty that set up the original boundary. These disputes are a major cause of wars and terrorism, as countries often try to assert their sovereignty over a territory through invasion, and non-country entities try to influence the actions of politicians through terrorism. International law does not support the use of force by one country to annex the territory of another country. Therefore, the breach of a country's borders or territorial disputes pose a threat to a country's very sovereignty and the right as a person of international law.
- **Social Unrest/Strikes:** A high degree of social and security risks would lead to political instability in economic development. In such environments of latent ethnic violence, social unrest, or terror threats, business as usual is impossible as all levels of economic activity are impacted.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

Infrastructure Update



Most Recent Infrastructure Alerts

<p>Critical May 03, 2022</p> <p>Update 173: Ukraine - Rocket Strike Witnessed - One Death Reported and Several Injured</p>	<p>Critical May 01, 2022</p> <p>Update 172: Ukraine - Multiple Airstrikes Witnessed - Eight Deaths Reported</p>	<p>Critical Apr 29, 2022</p> <p>Update 168: Kyiv, Ukraine - Missile Attacks Reported - Dozen Injured</p>	<p>Critical Apr 26, 2022</p> <p>Update 160: Ukraine - Missile Attacks on Multiple Regions - Seven Deaths Reported and Several Injured</p>	<p>Critical Apr 24, 2022</p> <p>Update 159: Ukraine - Shelling Intensified by Russian Forces - 16 Deaths Reported and Several Injured</p>
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Critical - Alerts

Critical May 03, 2022

Update 173: Ukraine - Rocket Strike Witnessed - One Death Reported and Several Injured

Critical May 01, 2022

Update 172: Ukraine - Multiple Airstrikes Witnessed - Eight Deaths Reported

Critical Apr 29, 2022

Update 168: Kyiv, Ukraine - Missile Attacks Reported - Dozen Injured

Critical Apr 26, 2022

Update 160: Ukraine - Missile Attacks on Multiple Regions - Seven Deaths Reported and Several Injured

Critical Apr 24, 2022

Update 159: Ukraine - Shelling Intensified by Russian Forces - 16 Deaths Reported and Several Injured

High - Alerts

No High Infrastructure alerts issued for the time period covered by this report

Moderate - Alerts

No Moderate Infrastructure alerts issued for the time period covered by this report

Low - Alerts

No Low Infrastructure alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Power Supply	Risk Rating	4.50	8.00	8.00	0.00	
Surplus/Deficit	Qualitative	Balanced	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Power Cuts	Qualitative	Intermittent Power Cuts	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Electrification Rate	%	100%	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Transportation	Risk Rating	5.75	8.00	8.00	0.00	
Road Connectivity Index	Quantitative	78.20	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Quality of Roads	Quantitative	3.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Airport Connectivity Index	Quantitative	56.60	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Efficiency of Air Transport Services	Quantitative	4.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Facilities	Risk Rating	7.05	7.50	7.50	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
ICT Adoption	Quantitative	51.90	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Average Internet Speed	Mbps	80.10	80.10	66.50	-13.6000	
Number of Software Parks	Quantitative	8.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Number of Special Economic Zones / Free Trade Zones (Current)	Quantitative	0.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Office Space Surplus/Deficit	Qualitative	Balanced	Catastrophic Event	Catastrophic Event	No	High Risk - See Infrastructure Implications section below
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Infrastructure Implications section below

*** Refer latest alerts under "Infrastructure" category*

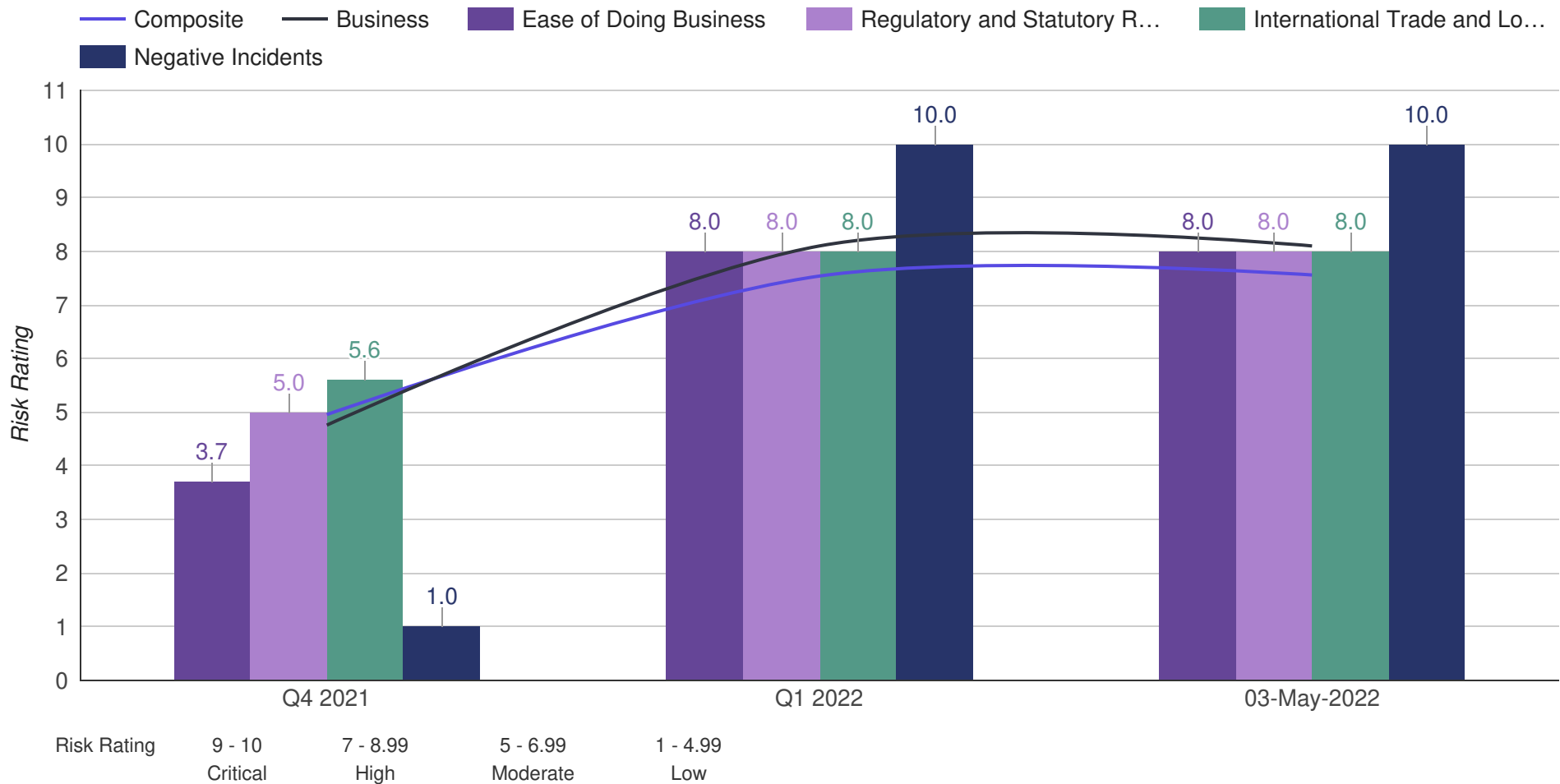
Analysts Comment(s)

Infrastructure across the country has been damaged due to the military attacks and explosions by Russia

Infrastructure Implications

- **Surplus/Deficit:** Deficiency in power reserves of the country can lead to fluctuating power supply causing frequent power outages/cuts and increase in electricity prices. This will ultimately impact business operations at large as all businesses rely on electrical power for every aspect of their operations.
- **Power Cuts:** Frequent power cuts have repercussions such as loss in employee productivity due to downtime, damaged equipment and inventory and added financial burden on power back-up. Power outages impact business operations at large as all businesses rely on electrical power for every aspect of their operations.
- **Electrification Rate:** Not all countries and areas have equal access to electricity, and the level of access can be indicative of the development level of the country. This means that electricity access serves as a good proxy for other indicators of wealth and opportunity in a country.
- **Road Connectivity Index:** Road connectivity index can be measured separately for motorized and nonmotorized travel, taking into account nonmotorized shortcuts, such as paths that connect cul-de-sacs, and barriers such highways and roads that lack sidewalks. A low index means that travelers have decreased route choice, allowing less direct connections for access between any two locations.
- **Quality of Roads:** If quality of the intra-country road system/network is inadequate, it cannot meet the needs of the efficient and fast-moving transportation of labour, goods and services, thereby causing hindrance to industrial and economic development of the country.
- **Airport Connectivity Index:** Indicator of a region's network concentration and its ability to move passengers from their origin to their destination with ease. Low air connectivity can contribute to reduced economic productivity as investment and innovation would not be encouraged in the region, thereby obstructing business operations and efficiency, and discouraging high-quality foreign employees.
- **Efficiency of Air Transport Services:** Low connectivity of airports within and outside of the location can hinder investment and business development, thereby impacting economic development.
- **ICT Adoption:** Information and communication technology (ICT) adoption is increasing globally and offers unique opportunities for information systems (IS) and electronic commerce researchers to undertake research that will have an impact. Low ICT adoption can hamper economic growth as there will be less use of emerging ICT technologies to support business activities which will gradually lead the country to be lagging in terms of business development.
- **Number of Software Parks:** Less number of software parks indicates that there is limited presence of providers of technology services in the country.
- **Number of Special Economic Zones / Free Trade Zones (Current):** Through Special Economic Zones and Free Trade Zones, a company gains a number of benefits, facilities and incentives such as low or no tax trade, producing goods at a lower price etc. Low number of SEZs and FTZs will not encourage or attract foreign investment by traders and third parties, thereby hindering business and economic development in the country.
- **Office Space Surplus/Deficit:** Inadequate office space will not encourage or attract traders to invest in the location for the purpose of business operations, which will hinder economic growth of the country.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

Business Update



Most Recent Business Alerts

Critical Apr 05, 2022

Several Countries - Visa Restrictions Imposed by Russia Effective April 04, 2022

Critical Apr 01, 2022

Update 86: European Countries - Russia Demands Foreign Buyers to Pay in Roubles for Russian Gas, Effective April 01, 2022

Critical - Alerts

Critical Apr 05, 2022

Several Countries - Visa Restrictions Imposed by Russia Effective April 04, 2022

Critical Apr 01, 2022

Update 86: European Countries - Russia Demands Foreign Buyers to Pay in Roubles for Russian Gas, Effective April 01, 2022

High - Alerts

No High Business alerts issued for the time period covered by this report

Moderate - Alerts

No Moderate Business alerts issued for the time period covered by this report

Low - Alerts

No Low Business alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Ease of Doing Business	Risk Rating	3.70	8.00	8.00	0.00	
Procedures to Start a Business	Quantitative	6.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Time to Start a Business	Days	6.50	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Procedures for New Building Construction Permits	Quantitative	10.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Time for New Building Construction Permits	Days	72.50	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Procedures to Register a Property	Quantitative	7.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Time to Register a Property	Days	15.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Business Dynamism	Quantitative	57.20	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Burden of Government Regulation	Quantitative	3.60	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Regulatory and Statutory Requirements	Risk Rating	5.00	8.00	8.00	0.00	
Strength of Legal Rights Index	Quantitative	8.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Depth of Credit Information Index	Quantitative	7.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Public Registry Coverage	%	2.40%	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Private Bureau Coverage	%	56.90%	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Extent of Disclosure Index	Quantitative	9.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Extent of Director Liability Index	Quantitative	2.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Ease of Shareholder Suits Index	Quantitative	6.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Strength of Minority Protection Index	Quantitative	68.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Taxation Payments	Numbers/Year	5.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Taxation Time	Hours/Year	328.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
International Trade and Logistics	Risk Rating	5.60	8.00	8.00	0.00	
Documentation Needed to Export	Quantitative	8.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Time to Export (Border Compliance)	Hours	6.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Documentation Needed to Import	Quantitative	8.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Time to Import (Border Compliance)	Hours	32.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Complexity of Tariffs	Rating	5.90	Catastrophic Event	Catastrophic Event	No	High Risk - See Business Implications section below
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Business Implications section below

*** Refer latest alerts under "Business" category*

Analysts Comment(s)

Amid political tensions between Ukraine and Russia, businesses across the country have been severely impacted.

Business Implications

- **Procedures to Start a Business:** High numbers indicate that there are a lot of procedures involved in obtaining all necessary approvals, licenses, permits, and completing any required notifications, verifications, or inspections for the company and employees with relevant authorities. This would cause a delay in starting a business.
- **Time to Start a Business:** The time taken to start a business depends on the type of business, the complexity of the business, and the type of location. High numbers indicate high number of procedures, time, cost, and paid-in minimum capital requirement for a small- to medium-size limited liability company to start up and formally operate in each economy's largest business city.
- **Procedures for New Building Construction Permits:** High numbers indicate that there are a lot of procedures involved in obtaining all necessary approvals such as land clearance, zonal clearance licenses, layout approvals, permits, and completing any required notifications, verifications, or inscriptions for the building's construction. This would cause a delay in setting up the company's building.
- **Time for New Building Construction Permits:** The total number of days required to build a warehouse depends on the various procedures involved in the process. High numbers indicate high number of procedures, time and cost to build a warehouse, including obtaining the necessary licenses and permits, submitting all required notifications, requesting and receiving all necessary inspections and obtaining utility connections to formally start operations in the warehouse.
- **Procedures to Register a Property:** High numbers indicate that there are more steps, time, and cost involved in registering a property, assuming a standardized case of an entrepreneur who wants to purchase land and a building that is already registered and free of title dispute. This would cause a

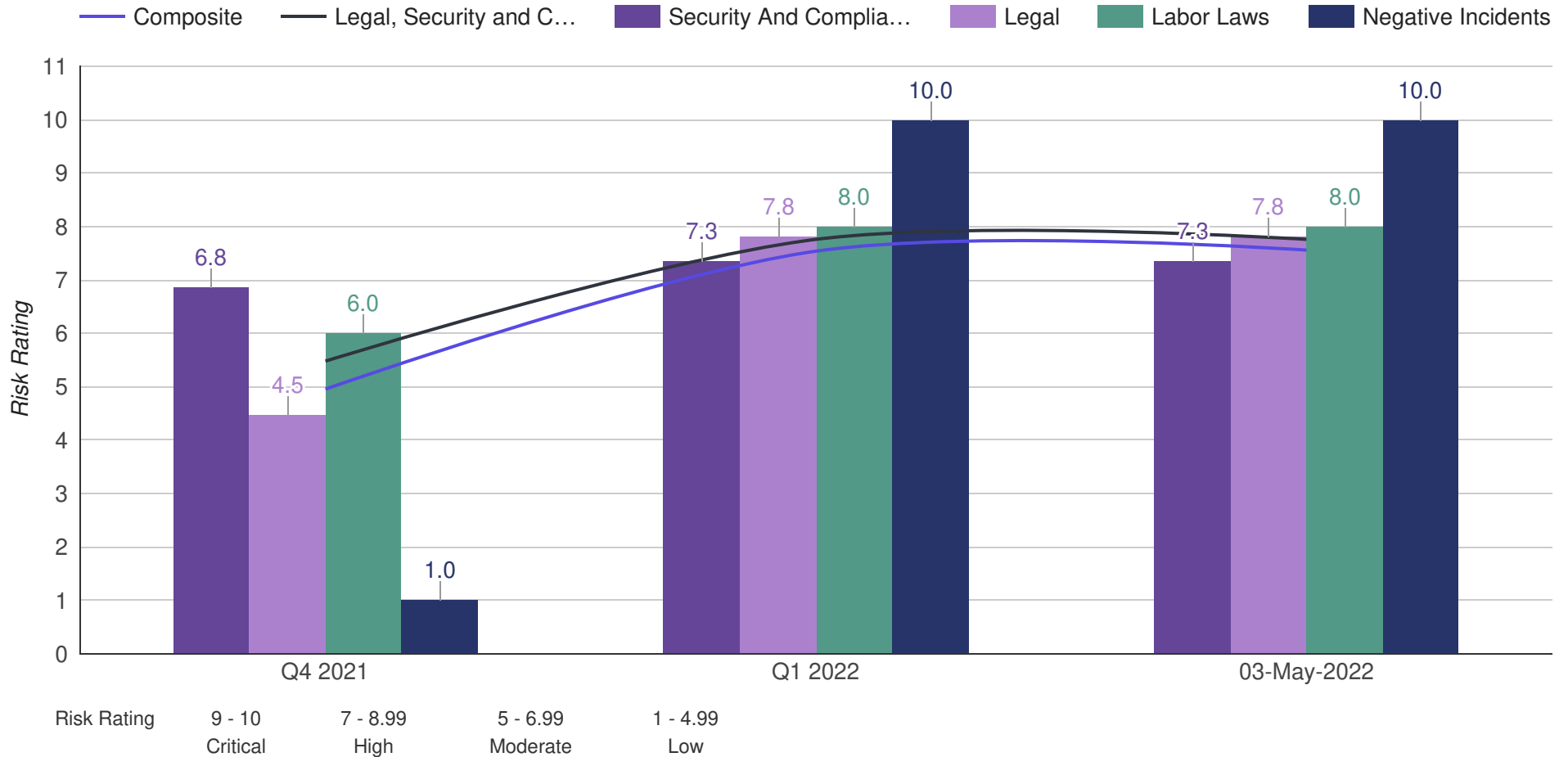
delay in registering the property concerned for the purpose of business.

- **Time to Register a Property**: High number of days indicate more time and cost to complete procedures which include purchase of a property from another business (the seller) and to transfer the property title to the buyer's name so that the buyer can use the property for expanding its business, or, if necessary, to sell the property to another business. This would cause a delay in registering the property concerned for the purpose of business.
- **Business Dynamism**: Low scores indicate inadequate quality of country's overall business network and the quality of individual firms' operations and strategies.
- **Burden of Government Regulation**: Governments create the rules and frameworks in which businesses are able to compete against each other. From time to time the government changes these rules and frameworks forcing businesses to change the way they operate. Hence, businesses can keenly be affected by changes in government policies.
- **Strength of Legal Rights Index**: Low scores indicate that collateral and bankruptcy laws are not designed to protect the rights of borrowers and lenders and thus facilitate lending.
- **Depth of Credit Information Index**: This indicator measures the depth of available credit information and the effectiveness of collateral and bankruptcy laws in facilitating lending. Visible credit information registries are vital because, with credit information sharing, lenders are more aware of borrowers' capacity and ability to repay their loans, which can significantly decrease default rates, lowering the perceived risk of lending and cost of capital and vice-versa.
- **Public Registry Coverage**: Low value indicates low creditworthiness of borrowers (individuals or firms) in the financial system, which may not facilitate the exchange of credit information among banks and other regulated financial institutions.
- **Private Bureau Coverage**: Low value indicates low creditworthiness of borrowers (individuals or firms) in the financial system, which may not facilitate the exchange of credit information among creditors.
- **Extent of Disclosure Index**: Low score indicates that there is less disclosure in case of a related party transaction, thereby involving risk of non-disclosure.
- **Extent of Director Liability Index**: Low score indicates that there is less ability of board members being held liable for harm caused by related-party transactions.
- **Ease of Shareholder Suits Index**: Low score indicates that there is less ability of shareholders to sue and hold directors liable in case of related party transactions.
- **Strength of Minority Protection Index**: Low score indicates that there is less protection of minority investors from conflicts of interest through one set of indicators and shareholders' rights in corporate governance through another.
- **Taxation Payments**: Tax cost for businesses matters for investment and growth. Where taxes are high, businesses are more inclined to opt-out of the formal sector. A higher number of taxation payment days are associated with fewer formal businesses and lower private investment. Also, a higher number of days indicates that the total number of taxes and contributions paid, the method of payment, the frequency of payment, the frequency of filing, and the number of agencies are more in the location. All these factors will not attract investment by the traders, and obstruct business development in the

region.

- **Taxation Time:** High numbers indicate that there is more time taken to prepare, file and pay three major types of taxes and contributions: the corporate income tax, value added or sales tax, and labor taxes, including payroll taxes and social contributions. This will ultimately constrain the government's ability to ignite the economy and hamper development in the nation.
- **Documentation Needed to Export:** High number indicates that there are more documents required per shipment to export goods and required for clearance by government ministries, customs authorities, port and container terminal authorities, health and technical control agencies and banks taken into account. This would cause a delay in the export of goods.
- **Time to Export (Border Compliance):** High number indicates that there is more time and cost involved for border compliance including time and cost for obtaining, preparing and submitting documents during port or border handling, customs clearance and inspection procedures. This would cause a delay in the export of goods.
- **Documentation Needed to Import:** High number indicates that there are more documents required per shipment to import goods and required for clearance by government ministries, customs authorities, port and container terminal authorities, health and technical control agencies and banks taken into account. This would cause a delay in the import of goods.
- **Time to Import (Border Compliance):** High number indicates that there is more time and cost involved for border compliance including time and cost for obtaining, preparing and submitting documents during port or border handling, customs clearance and inspection procedures. This would cause a delay in the import of goods.
- **Complexity of Tariffs:** Higher tariffs increase the prices of imported goods for a business which will then lead to higher consumer prices. Tariffs also reduce efficiencies by allowing companies that would not exist in a more competitive market to remain open.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

Legal, Security and Compliance Update



Most Recent Legal, Security and Compliance Alerts

<p>Critical May 01, 2022</p> <p>Update 171: Ukraine - Cyber Attack Reported on Multiple Websites</p>	<p>Critical Apr 05, 2022</p> <p>Several Countries - Visa Restrictions Imposed by Russia Effective April 04, 2022</p>	<p>Critical Apr 04, 2022</p> <p>Update 99: Ukraine - Probe Announced Against Russian War Crimes</p>	<p>Critical Apr 02, 2022</p> <p>Update 90: Odessa, Ukraine - Missile Strike in Residential Areas - Casualties Reported</p>	<p>Critical Apr 01, 2022</p> <p>Update 85: Ukraine - Russian Forces Withdraws from Chernobyl Nuclear Power Station as Fighting Raged in Kyiv and Other Ukrainian Outskirts</p>
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Critical - Alerts

- Critical** May 01, 2022

Update 171: Ukraine - Cyber Attack Reported on Multiple Websites
- Critical** Apr 05, 2022

Several Countries - Visa Restrictions Imposed by Russia Effective April 04, 2022
- Critical** Apr 04, 2022

Update 99: Ukraine - Probe Announced Against Russian War Crimes
- Critical** Apr 02, 2022

Update 90: Odessa, Ukraine - Missile Strike in Residential Areas - Casualties Reported
- Critical** Apr 01, 2022

Update 85: Ukraine - Russian Forces Withdraws from Chernobyl Nuclear Power Station as Fighting Raged in Kyiv and Other Ukrainian Outskirts

High - Alerts

- High** Jan 17, 2022

Disruption Risk Early Warning: Update 1: Ukraine - Cyber Attack Warning Issued by Microsoft

Moderate - Alerts

No Moderate Legal, Security and Compliance alerts issued for the time period covered by this report

Low - Alerts

No Low Legal, Security and Compliance alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Security And Compliance	Risk Rating	6.85	7.35	7.35	0.00	
Data Protection Laws	Qualitative	Moderate Laws	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
IP Protection Laws	Quantitative	3.40	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Cybercrime	Rank	12.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Cyber Attacks	Qualitative	Yes	Yes	Yes	No	Critical Risk - See Legal, Security and Compliance Implications section below
Software Piracy Rate	%	80%	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Strength of Auditing and Reporting Standards	Rating	3.90	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Sanctions Imposed	Qualitative	No	No	No	No	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Financial Action Task Force (FATF)	Qualitative	No	No	No	No	Critical Risk - See Legal, Security and Compliance Implications section below
Legal	Risk Rating	4.47	7.80	7.80	0.00	
Quality of Judicial Processes Index	Quantitative	11.50	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Time to Enforce a Contract	Days	378.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Tax Policy Risk	EIU Rating		Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Anti-Bribery Laws	Qualitative	Yes	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Anti-Money Laundering Laws	Qualitative	Yes	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Patents Issued in the Last One Year	Quantitative	2,469.00	2,179.00	2,179.00	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Presence of Labor Union	Qualitative	Yes	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Labor Market Risk	EIU Rating		Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Labor Laws	Risk Rating	6.00	8.00	8.00	0.00	
Working Hours for Day Shift	Hours	8.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Working Hours for Night Shift	Hours	8.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Weekly Working Hours	Hours	40.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Overtime Pay (% of Hourly Pay)	%	100%	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Public Holidays per Year	Days	11.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Legal, Security and Compliance Implications section below
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Legal, Security and Compliance Implications section below

*** Refer latest alerts under "Legal, Security and Compliance" category*

Analysts Comment(s)

Multiple cyber attacks have been reported on government websites and banks during ongoing tensions between Ukraine and Russia.

Legal, Security and Compliance Implications

- **Data Protection Laws:** Poor data protection laws indicate lower degree of data security thereby raising questions on privacy compliant services and solutions. Lack of stricter regulations could increase the risk of data breach/leak leading to hefty fines and negatively impact brand and reputation.
- **IP Protection Laws:** Poor IP Protection Laws indicate that the country does not facilitate or encourage innovation and adequate protection to intellectual property is not provided.
- **Cybercrime:** Lower cybercrime rank indicates location is highly susceptible to attacks such as malware, spam, exploits, botnet activities, phishing, and cyber-attacks. Adequate monitoring and cyber protection policies are not provided by the government.
- **Cyber Attacks:** Higher score indicates that the asset of a country is exposed to unauthorized access which can often result in substantial financial loss arising from theft of corporate and information, money, disruption to trading, loss of business or contract, reputational damage, legal consequences of cyber breach. Government organizations and companies could also witness disruption to cellular and computer networks or paralysis of multiple systems.

- **Software Piracy Rate:** Higher software piracy rate could lead to hefty fines by IT regulatory bodies due to copyright infringement issues. Piracy not only causes financial loss but also negatively impacts publicity and private embarrassment.
- **Strength of Auditing and Reporting Standards:** Poor auditing and reporting standards indicates credibility issues, thereby, widening the gap between entrepreneurs who need capital and investors who can provide capital. This could impact long-term capital investment in the country. Poor audit standard impacts trust, and weakens accountability and confidence in financial reporting.
- **Financial Action Task Force (FATF):** Non-member country represents a higher risk of money laundering and terrorism financing. It indicates poor global response to prevent organized crime, corruption and terrorism.
- **Quality of Judicial Processes Index:** Low score indicates weaker practices and policies in country's court system in four areas: court structure and proceedings, case management, court automation and alternative dispute resolution.
- **Time to Enforce a Contract:** High number indicates the cost and time for resolving a commercial dispute through a local first-instance court will be higher.
- **Tax Policy Risk:** Higher rating indicates taxes in the country are higher, unpredictable, and less transparent.
- **Anti-Bribery Laws:** Poor anti-bribery laws could de-rail development plans and cause unnecessary, unsuitable, or incoherent investment decisions. It could also initiate dangerous projects which can affect the lives of many.
- **Anti-Money Laundering Laws:** Poor anti-bribery laws could de-rail development plans and cause unnecessary, unsuitable, or incoherent investment decisions. This can decrease labour output, reduce investment, and consequently impact economic growth. Corruption could harmfully impact investment climate as well as slow down foreign direct investment and stream of foreign aid.
- **Presence of Labor Union:** Strong presence of labor unions could lead to macro-economic problems such as wage inflation and lost productivity due to strikes. Unions focus significantly on the seniority of the workers which can translate into the lack of advancement for new and high performing employees to advance.
- **Labor Market Risk:** Higher rating indicates poor industrial relations, restrictiveness of labor laws, weaker wage regulation, and less hiring of foreign nationals.
- **Working Hours for Day Shift:** Working hours lesser than 7 hours per day render the employees under-utilized and increase the cost to company.
- **Working Hours for Night Shift:** Working hours lesser than 7 hours per day render the employees under-utilized and increase the cost to company.
- **Weekly Working Hours:** Working hours which are lesser than 35 hours per week render the employees under-utilized and increase the cost to company.
- **Overtime Pay (% of Hourly Pay):** A high overtime pay mandated by government increases the cost to company and restricts the efficiency of the organizations in the country to utilize their staff effectively.
- **Public Holidays per Year:** More number of public holidays render the employees under-utilized and increase the cost to the company.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

Scalability Update



Most Recent Scalability Alerts

Most Recent - Alerts

No Scalability alerts issued for the time period covered by this report

Critical - Alerts

No Critical Scalability alerts issued for the time period covered by this report

High - Alerts

No High Scalability alerts issued for the time period covered by this report

Moderate - Alerts

No Moderate Scalability alerts issued for the time period covered by this report

Low - Alerts

No Low Scalability alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Key Service Industries - Market Size	Risk Rating	8.25	8.00	8.00	0.00	
Banking and Financial Services	US\$ B	\$34.23	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Healthcare	US\$ B	\$4.90	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Insurance	US\$ B	\$0.89	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Information and Communications Technology	US\$ B	\$5.40	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Provider Maturity	Risk Rating	1.00	8.00	8.00	0.00	
Presence of Tier 1 Companies (With Operations Over a Billion Dollars)	Qualitative	Yes	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Presence of Tier 2 Companies (With Operations Between 500 Million and a Billion)	Qualitative	Yes	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Population Spread	Risk Rating	2.80	2.80	2.80	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
0-14 Years	%	16.10%	16.10%	16.10%	0%	High Risk - See Scalability Implications section below
15-64 Years	%	66.50%	66.20%	66.20%	0%	
65 Years and Above	%	17.40%	17.70%	17.70%	0%	
People Scalability	Risk Rating	5.56	8.00	8.00	0.00	
Labor Force	M	16.03	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Literacy Rate	%	99.80%	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Skillset of Graduates	Quantitative	4.30	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Ease of Finding Skilled Employees	Quantitative	4.40	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Ease of Hiring Foreign Labor	Quantitative	4.20	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Quality of Research Institutions	Quantitative	11.40	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Innovation Capability	Quantitative	40.10	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Annual Non-STEM Graduate Pool	Quantitative	512,400.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Annual STEM Graduate Pool	Quantitative	130,000.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Labor Pool for Technology Services	Quantitative	185,000.00	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Attrition Rate in Technology Services	%	10%	Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Overall Attrition Rate	%		Catastrophic Event	Catastrophic Event	No	High Risk - See Scalability Implications section below
Language Proficiency	Risk Rating	9.00	9.00	9.00	0.00	
English Proficiency	Qualitative	Low	Low	Low	No	Critical Risk - See Scalability Implications section below
Spanish Proficiency	Qualitative	Low	Low	Low	No	Critical Risk - See Scalability Implications section below
Multilingual Proficiency	Qualitative	Moderate	Moderate	Moderate	No	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See Scalability Implications section below

*** Refer latest alerts under "Scalability" category*

Analysts Comment(s)

Amid political tensions between Ukraine and Russia, the scalability of the country is at risk. The Russian invasion of Ukraine has already had a major impact on industries such as energy, commodities markets and IT among others.

Scalability Implications

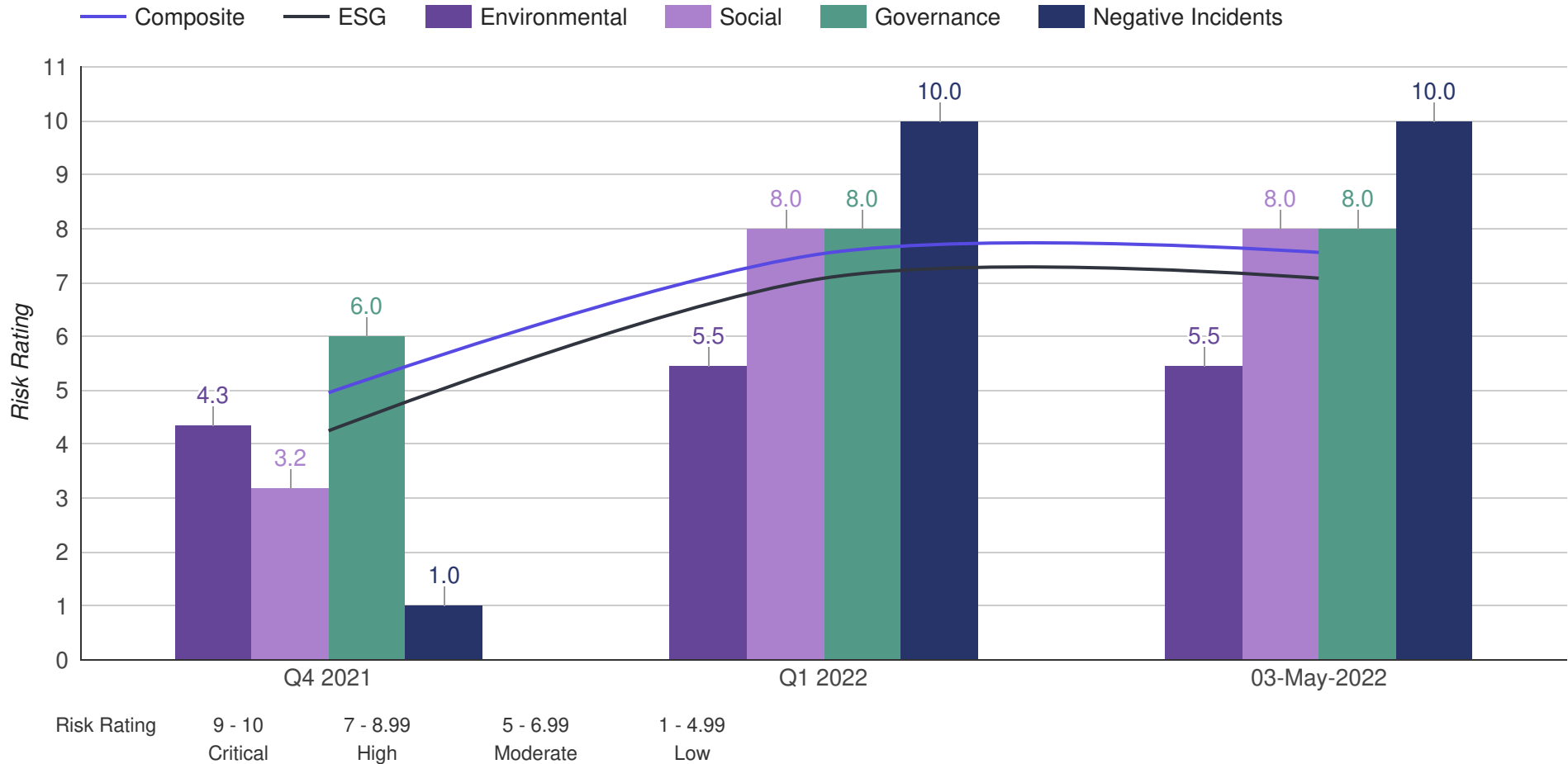
- **Banking and Financial Services:** Higher risk score indicates limited issuance of short-term and long-term funds by the government which impacts revenue generation and capital expenditure. Shortage of banks and financial services in a country restricts creation of new capital, and consequently impacts the growth process.
- **Healthcare:** Higher risk score indicates poor healthcare infrastructure in the country which impacts GDP, exports status, employment opportunities, capital investment, among others. Poor quality health services are holding back progress on improving health at all income levels across the country.
- **Insurance:** Higher risk score indicates poor insurance services in the country. This means limited employment, declining GDP, unstable financial system, and weaker balance of payments.
- **Information and Communications Technology:** Higher risk score indicates poor information and communication technology (ICT) services in the country. Limited ICT services impacts the efficiency of a business's output rate, restricting larger quantities of products to be moved or of services to be rendered. This increases the operational cost and slows down innovation.
- **Presence of Tier 1 Companies (With Operations Over a Billion Dollars):** Low presence of tier 1 companies which are generally the largest or the most technically capable (multinational corporations) indicates improper supply-chain, lower employment opportunities, and stunted industrial and

technological performance of the country.

- **Presence of Tier 2 Companies (With Operations Between 500 Million and a Billion):** Low presence of tier 2 companies which are comparatively smaller than tier 1, indicates there is a possible risk to supply chain system, and adherence to safety and quality standards could be compromised
- **0-14 Years:** Lower percentage of young population poses high risk as it would adversely impact the available workforce.
- **Labor Force:** Lower number of available workforces poses high risk for scaling up of operations.
- **Literacy Rate:** Low literacy rate suggests the existence of weaker primary education system and/or literacy programmes failing to enable a large proportion of the population to acquire the ability of using the written word (and making simple arithmetic calculations) in daily life and to continue learning. Low literacy rate in the region will lead to shortage of skilled workforce, and ultimately obstruct business and economic development of the region.
- **Skillset of Graduates:** Low score indicates poor skills possessed by the graduating students from secondary education in the country which is needed by companies. It suggests there is a lack of qualified human capital in both, firms and the countries, to compete and grow in a highly competitive world economy conditions.
- **Ease of Finding Skilled Employees:** Low score indicates that it is challenging for companies to find people in the country with the skills required to fill their vacancies. This leads to talent management issues which impacts service delivery and causes customer dissatisfaction.
- **Ease of Hiring Foreign Labor:** Low score suggests regulations related to the hiring of foreign labor is limited in the country. This will impact diversity of labour force in the country.
- **Quality of Research Institutions:** Low rating indicates poor standard of private and public research institutions in the country. This can impact research and indicates slower rate of innovation.
- **Innovation Capability:** Low rating indicates limited capability and resources of firms for discovering opportunities in order to engage in new product development.
- **Annual Non-STEM Graduate Pool:** Lesser number of graduating students to run the humanities, arts, literature and management sector annually is a major road block for producing adequate labor pool that is required for scaling up of operations.
- **Annual STEM Graduate Pool:** Lesser number of graduating students to run science, technology, and engineering sector every year in the country annually is a major road block for producing adequate labor pool that is required for scaling up of operations.
- **Labor Pool for Technology Services:** Lower labor pool indicates shortage of scientists, engineers, and other resources in the country to build a competitive environment, lead innovation, and incentivize excellence in the field of technology.
- **Attrition Rate in Technology Services:** High employee turnover is a warning sign of low morale among technology companies in the country which can affect the overall productivity due to the loss of experienced folks.
- **Overall Attrition Rate:** High employee turnover is a warning sign of low morale across different industries in the country which can affect the overall productivity and impact overall economic development.
- **English Proficiency:** A 'Poor' or 'Very Poor' data indicates that hiring local people with adequate english language skills is a major challenge.

- **Spanish Proficiency:** A 'Poor' or 'Very Poor' data indicates that hiring local people with adequate Spanish language skills is a major challenge. This could limit expansion of global client base and impact exports.
- **Any Other Negative Incidents:** Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

ESG Update



Most Recent ESG Alerts

<p>High Dec 19, 2021</p> <p>Update 58: Ukraine - COVID-19 Variant 'Omicron' - First Case Reported</p>	<p>Moderate Dec 03, 2021</p> <p>Update 57: Ukraine - COVID-19 Variant 'Omicron' Concern Results in Entry Restrictions for Eight African Countries</p>	<p>Critical Nov 27, 2021</p> <p>Multiple Countries - Travel Restrictions Imposed on South Africa Amid New COVID-19 Variant 'Omicron'</p>	<p>Moderate Nov 26, 2021</p> <p>Ukraine - Polio Emergency Announced Amid Surge in COVID-19 Cases</p>	<p>Moderate Nov 10, 2021</p> <p>Update 56: Ukraine - Reports Rise in Daily COVID-19 Deaths</p>
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Critical - Alerts

Critical Nov 27, 2021
 Multiple Countries - Travel Restrictions Imposed on South Africa Amid New COVID-19 Variant 'Omicron'

High - Alerts

High Dec 19, 2021
 Update 58: Ukraine - COVID-19 Variant 'Omicron' - First Case Reported

Moderate - Alerts

Moderate Dec 03, 2021
 Update 57: Ukraine - COVID-19 Variant 'Omicron' Concern Results in Entry Restrictions for Eight African Countries

Moderate Nov 26, 2021
 Ukraine - Polio Emergency Announced Amid Surge in COVID-19 Cases

Moderate Nov 10, 2021
 Update 56: Ukraine - Reports Rise in Daily COVID-19 Deaths

Moderate Oct 23, 2021
 Update 55: Ukraine - Reports 23,785 New COVID-19 Cases in Last 24 Hours, National Total Raises to 2,748,614

Low - Alerts

No Low ESG alerts issued for the time period covered by this report

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Environmental	Risk Rating	4.35	5.45	5.45	0.00	
CO2 emissions (metric tons per capita)	Metric Tons	223.00	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Climate Risk Index	Quantitative	105.33	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
World Risk Index	Quantitative	2.90	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Pollution Index	Quantitative	63.04	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Environmental Performance Index	Quantitative	49.50	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Seismic Zone	Quantitative	1.00	1.00	1.00	0.00	
Earthquake	Quantitative	No Major Earthquake Reported	No Major Earthquake Reported	No Major Earthquake Reported	No	
Presence of Nuclear Power Plants in the Seismic Zone	Qualitative	Yes	Yes	Yes	No	Critical Risk - See ESG Implications section below
Volcanic Eruptions	Qualitative	No	No	No	No	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Floods	Qualitative	No	No	No	No	
Epidemics	Qualitative	Yes	Yes	Yes	No	Critical Risk - See ESG Implications section below
Social	Risk Rating	3.20	8.00	8.00	0.00	
Human Development Index	Quantitative	0.78	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Hospital beds (per 10,000 people)	Quantitative	75.00	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Health Care System Index	Quantitative	53.70	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Cost of Living Index	Quantitative	19.43	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Gender Inequality Index	Quantitative	0.23	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Gini Coefficient	Quantitative	26.10	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Governance	Risk Rating	6.00	8.00	8.00	0.00	

Category / Metric	Measurement	Q4 2021	Q1 2022	03-May-2022	Change from Q1 2022	Additional Comments
Index of Economic Freedom	Quantitative	56.20	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Global Innovation Index	Quantitative	36.32	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Regulatory Quality: Estimate	Quantitative	-0.3000	Catastrophic Event	Catastrophic Event	No	High Risk - See ESG Implications section below
Negative Incidents	Risk Rating	1.00	10.00	10.00	0.00	
Any Other Negative Incidents	Qualitative	No	Yes	Yes	No	Critical Risk - See ESG Implications section below

** Refer latest alerts under "ESG" category

ESG Implications

- CO2 emissions (metric tons per capita)**: Environmental effects of CO2 emissions have been enormous, affecting both the ecosystem and human beings habiting it. The hazards include, among others, the vulnerability of the economic sector to the recurrent droughts, flood and cyclones, reduction of some plant and animal populations, spread of diseases vectors including malaria, freezing and breaking-up of ice on rivers and lakes, reduction in food production and agricultural productivity, increase in death rate and threat to sustainable development.
- Climate Risk Index**: Impacts from extreme-weather events hit the poorest countries hardest as they are particularly vulnerable to the damaging effects of a hazard, have a lower coping capacity and may need more time to rebuild and recover. Effective climate change mitigation and adaptation to prevent or minimize potential damage is therefore in the self-interest of all countries worldwide.
- World Risk Index**: World Risk Index analyzes a country's vulnerability, which is the country's predisposition to suffer harm when being hit by a natural hazard. A country's specific risk is determined by multiplying its exposure by its vulnerability. Risk is at its highest where a high level of exposure to

natural hazards coincides with very vulnerable societies. On the other hand, low societal susceptibility and a high capacity to deal with hazard exposure can, to an extent, mitigate and limit the disaster risk, even in exposed countries.

- **Pollution Index:** Industrialization and urbanization have intensified environmental health risks and pollution, especially in developing countries. Air pollution, lead poisoning, inadequate water supply, sanitation and hygiene, and hazardous wastes cause debilitating and fatal illnesses, create harmful living conditions, and destroy ecosystems. Pollution stunts economic growth and exacerbates poverty and inequality in both urban and rural areas of a city.
- **Environmental Performance Index:** Lower index indicates a non-sustainable future and lack of country's efforts in addressing the environmental challenges efficiently.
- **Presence of Nuclear Power Plants in the Seismic Zone:** Nuclear reactors that are operating in areas of significant seismic activity (earthquake danger zones) could be prone to major accident sequence.
- **Epidemics:** Epidemics can cause significant, widespread increases in morbidity and mortality and have disproportionately higher mortality impacts on low- and middle-income countries. It can also cause economic damage through multiple channels, including short-term fiscal shocks and longer-term negative shocks to economic growth. In countries with weak institutions and legacies of political instability, epidemics can increase political stresses and tensions.
- **Human Development Index:** Lower score implies the country is under-developed, has poor standard of living, and the income per capita of individuals is low.
- **Hospital beds (per 10,000 people):** The number of beds per 10,000 is used as an indicator of health infrastructure in general. Poor bed availability points to a country's failure to expand its health infrastructure in keeping with the population growth. Considering the extremely poor availability of beds in any country, it is little wonder that people would struggle to find beds during the pandemic/epidemic resulting in social anxiety and unrest in a country.
- **Health Care System Index:** Lower index indicates country's lack of commitment to accelerating progress and high-quality primary care.
- **Cost of Living Index:** High cost of living index will account for more money needed to cover basic expenses such as housing, food, taxes, and healthcare in a certain place and time period. If expenses are high in a region, salary levels must be higher so that people can afford to live in that region and save some money for themselves.
- **Gender Inequality Index:** Gender inequalities persist in several areas, undermining women's economic opportunities and affecting the global economy. Persisting inequalities come at a significant cost for women, men, employers, and society as a whole, leaving a large share of talent under-utilized. Increased gender equality will help to improve employment, address productivity challenges and cope with population aging issues in a country.
- **Gini Coefficient:** A coefficient of zero indicates a perfectly equal distribution of income or wealth within a population. However, a coefficient of one represents a perfect inequality when one person in a population receives all the income, while other people earn nothing. Besides, in some rare cases, the coefficient can exceed 100%. This may theoretically occur when the income or wealth of a population is negative. A higher Gini Coefficient indicates greater inequality, with high-income individuals receiving much larger percentages of the total income of the population.
- **Index of Economic Freedom:** Low index indicates poor ease of doing business and more binding constraints on economic growth and prosperity. It

implies poor degree of economic freedom in the country indicating improper rule of law, regulatory inefficiency, and limited open markets.

- **Global Innovation Index**: Higher risk indicates poor innovation across political environment, education, infrastructure and business sectors.
- **Regulatory Quality: Estimate**: Poor score indicates the inability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. This suggests unnecessary burdens on citizens and businesses and prevents transparency in the design of and access to regulations for protection of health, safety, and the environment.
- **Any Other Negative Incidents**: Any negative incident can cause some kind of business disruption to the organization from an operational perspective.

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About Supply Wisdom®

Supply Wisdom is the leader in full-stack continuous risk intelligence on third parties and locations. Our solutions automate risk management for enterprises and deliver continuous third-party and location risk intelligence, risk monitoring and risk actions across the widest risk aperture to minimize the risks of disruption facing their business, supply chains and third parties.

Leading enterprises partner with Supply Wisdom because our patented, unique solution:

- Provides the broadest risk domain coverage available in the market
- Continuously monitors third parties and locations to provide near real-time risk intelligence
- Validates and prioritizes risk findings
- Eliminates noise to enable focus on the most critical risks mitigation efforts
- Leverages technology to automate risk management from identification to risk action
- Seamlessly integrates into any platform maximizing value of investment

Supply Wisdom enables enterprises to move faster, do more with less, prioritize, and act proactively and confidently.

Supply Wisdom's Full-Stack Continuous Risk Coverage

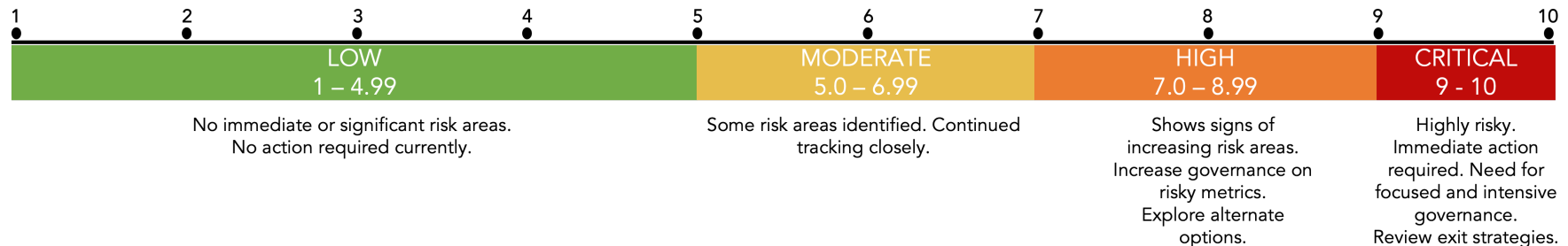


Risk Reports & Event Alerts

- Our Risk Reports provide a detailed assessment of risks and Supply Wisdom’s analysis of the risk scenario
- Each report offers risk profiling, risk ratings and risk mitigation recommendations
- Quarterly updates continuously highlight the changes to risk scenarios and update the risk rating and recommendations
- Event Alerts provide quick summaries of real-time events that impact risk scenarios,

Methodology

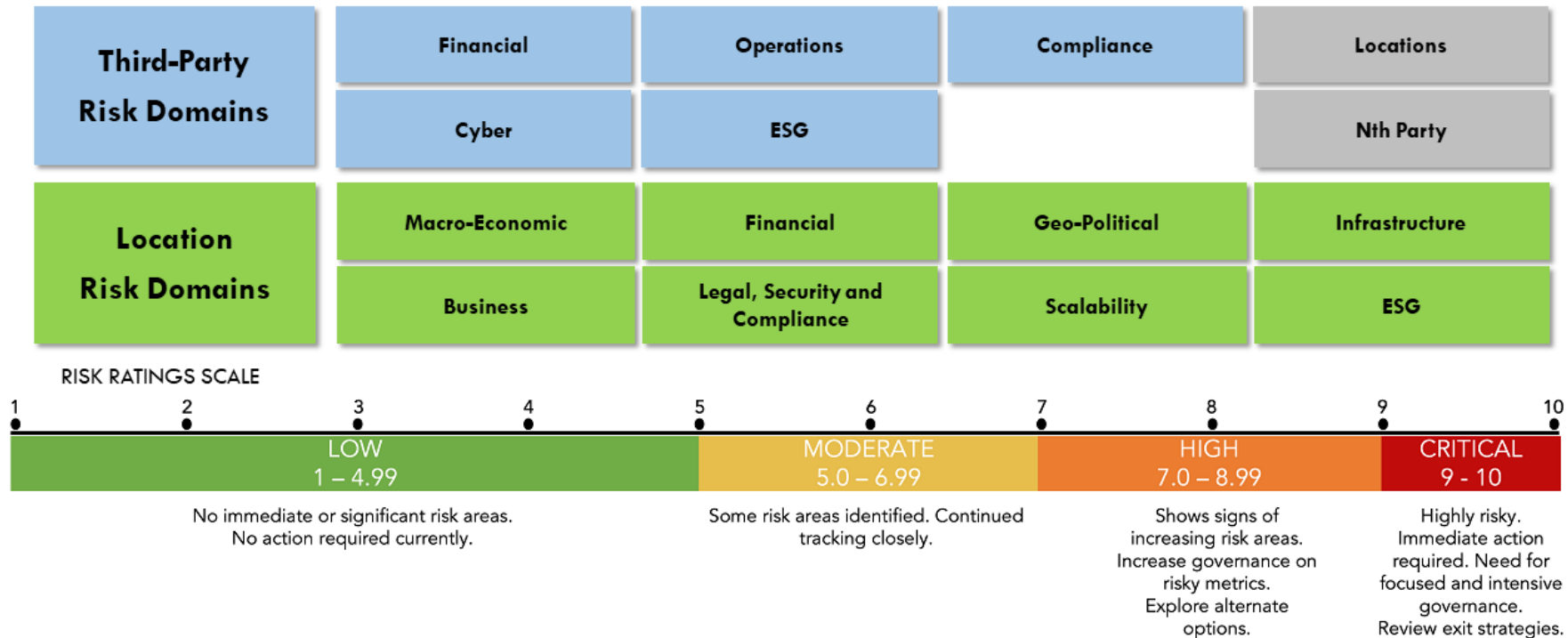
- Risk algorithms are driven by risk thresholds and weightings assigned to individual risk metrics, associated risk domains and their risk categories. Risk thresholds and weightages are based on current market/industry dynamics and trends and are expert reviewed twice a year to ensure they remain topical and relevant. All risk metrics are rolled up first into category ratings, then risk domain ratings and finally comprehensive risk rating for the entity being monitored.
- Each of the individual metrics is quantified into a risk score using pre-defined algorithms. The risk score ranges on a scale of 1 to 10 with 1 being low risk to 10 being critical risk. Scores are color coded for ease of visualization.



Methodology

Over 350 data metrics factor into our **Standard Risk Rating** computations, the percentage (%) weighting of each **Category** may vary.

Supply Wisdom® Automating Risk Intelligence
TPRM Continuous Risk Framework



Domain Definitions

Location Domain	Description and Tracked Metrics
Macro-Economic	The Macro-Economic health of a location via metrics covering the risk categories of Economic Indicators, Credit Rating Risk, and Currency Risk.
Financial	The Financial health of a location via metrics covering the risk categories of Labor Cost, Operational Cost, and Taxation.
Geo-Political	The Geo-Political health of a location via metrics covering the risk categories of Political and Social/Social Security.
Infrastructure	The Infrastructure health of a location via metrics covering the risk categories of Power Supply, Transportation, and Facilities.
Business	The Business health of a location via metrics covering the risk categories of Ease of Doing Business, Regulatory & Statutory Requirements, International Trade and Logistics.
Legal, Security and Compliance	The Legal, Security and Compliance health of a location via metrics covering the risk categories of Security & Compliance, Legal, and Labor Laws.
Scalability	The Scalability health of a location via metrics covering the risk categories of Key Service Industries – Market Size, Provider Maturity, Population Spread, People Scalability, and Language Proficiency.
ESG	The ESG health of a location via metrics covering the risk categories of Environmental, Social and Governance.

Appendix I - Abbreviations

Abbreviation	Stands For
B	Billion
BPO	Business Process Outsourcing
BPS	Basis Points
CAD	Current Account Deficit
CBD	Central Business District
CPI	Consumer Price Index
EIU	The Economist Intelligence Unit
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FTZ	Free Trade Zone
Gbps	Giga bits per second
GDP	Gross Domestic Product
Kwh	Kilo Watt Per Hour
Ltr	Liter
M	Million

Abbreviation	Stands For
Mbps	Mega bits per second
MW	Mega Watt
PBD	Peripheral Business District
PLR	Prime Lending Rate
QoQ	Quarter on Quarter
Qtr	Quarter
SBD	Secondary Business District
SEZ	Special Economic Zone
Sq ft	Square Foot
Sq M	Square Meter
VAT	Value Added Tax
WPI	Wholesale Price Index
YoY	Year on Year
YTD	Year to Date

