



2023 EU Wide Stress Test Launch

ALVAREZ & MARSAL
LEADERSHIP. ACTION. RESULTS.™

Highly severe macro scenarios combined high inflation will foresee a possible increase in capital depletion as compared to 2021 Stress Test results

February - 2023



Executive Summary (1/2)

Much more severe macro scenarios compared to ST'21 and high inflation, which are not compensated by high rates, foresee a possible increase in capital depletion from previous exercises

European Union Shocks	Net Shock Impact ¹			Baseline Drop Impact		
	ST 2023	ST 2021	Severity Chg.	ST 2023	ST 2021	Severity Chg.
GDP (3-year ▼)	-6.0%	-3.6%	↑	-9.8%	-12.9%	↓
Unemployment (3-year ▲)	6.1%	4.7%	↑	5.9%	5.0%	↑
Residential Property (3-year ▼)	-21.1%	-16.1%	↑	-23.8%	-21.9%	↑
Commercial Property (3-year ▼)	-29%	-31%	↓	-36%	-41%	↓
10-year Long Term Rate (1-year ▲)	375bps	42bps	↑	289bps	59bps	↑
Equity Prices (1-year ▼)	-25%	-25%	→	-25%	-25%	→

- Much worse GDP and unemployment rate shocks**, with a 3-year net shock of 6% and 6.1% respectively. GDP shock compared to ST'21 is greater than 200 bps in all countries except for Portugal, Ireland, Netherlands and Greece. Unemployment rate shows divergences across EU countries, with highest impact compared to ST'21 in Ireland.
- Residential real estate prices** are worse than in ST'21 (21% vs. 16%) and **Commercial Real Estate** slightly better (29% vs. 31% shock). Netherlands is by far the country most affected by RRE shocks (1391 bps difference compared to ST'21).
- High discrepancies in GVA by sectors** and countries, with overall higher 3-year impact in Mining, Manufacturing, Utilities and Transportation.
- Drastically high interest rates** (375bps of 10-year rate vs. 42 bps of ST'21) will have a negative impact in Capital through OCI Revaluation and NII pressure through methodology constraints and deposit passthrough effects.
- Short- and long-term rates** presents a very material increase in 2023, and slightly decreases in 2024-25. **Sovereign spread shocks** increase drastically in southern countries (+82bps vs. ST'21) and remains flat in the rest. **No FX impact** either in baseline or adverse for UK, US or Japan.
- UK and US:** Much worse GDP, unemployment rate and Residential Real Estate (RRE) shocks vs St'21. For UK, shocks reaches 8.3%, 6.8% and 22% respectively, whereas for US the shocks hit 4.6%, 3% and 22% for the same macro variables. The scenario is more severe than the 2022 scenarios of the Bank of England and the Federal Reserve System.
- Highest impact expected in 2024** due to accumulation of negative effects.

Executive Summary (2/2)

Additional considerations of 2023 EU Wide Stress Test

1 Scope

- **Increased sample banks**, from 50 to 76, covering 75% of the banking sector in the euro area, non-euro area EU Member States and Norway
- Minimum threshold of EUR 30 bn, plus potential additional institutions at the discretion of competent authorities

2 Methodology

- **Very similar methodology compared to ST 2021.** Main changes:
 - **Credit Risk:** Additional template by sector, including starting point + projections; removal of moratoria restatement at credit risk starting point while methodology for PGS remains the same; NPL backstop calendar template becomes more relevant vs. ST'21; leverage finance template
 - **Operational Risk:** removal of floor for conduct material risks for baseline scenario
 - **Net Fees and Commission Income:** projections based on prescribed growth rate parameters based on supervisory top-down models
- **Proportionality features** for smaller banks

3 Calendar

- **Exercise launched on 31 January 2023**
- **ADC submission on 6 March and FDC1 on 28 March.** Additional FDC submissions are expected until late June
- Results expected to be published in **July 2023**

SUMMARY OF SCENARIOS – MACRO EU COUNTRIES



The scenarios narrative shows geopolitical tensions leading to stagflation, with increased energy prices and production costs, further supply chain disruptions worldwide, inflation persistently high and pressures on economic activity.

Much worse GDP, unemployment rate and Residential Real Estate (RRE) shocks, with a 3-year net shock of 6%, 6.1% and 21% respectively.

GDP shocks present low discrepancies across countries compared to ST'21 and is greater than 200 bps vs. ST'21 in all countries except for Portugal, Ireland, Netherlands and Greece. Unemployment rate shows divergences across EU countries, with higher impact compared to ST'21 in Ireland and France. Few countries such as Germany and Spain show slightly lower impacts vs. previous exercise. Netherlands is by far the country most affected by RRE shocks (1391 bps difference compared to ST'21), followed by Germany and Sweden.

	GDP (Net shock) ¹				Unemployment (Net shock) ¹				House Price Index (Net shock) ¹			
	ST 2023	ST 2021	Difference (bps)		ST 2023	ST 2021	Difference (bps)		ST 2023	ST 2021	Difference (bps)	
France	-574	-343		+231	595	435		+159	-1974	-1536		+439
Germany	-643	-388		+256	409	485		-76	-2580	-1849		+731
Greece	-548	-357		+191	478	475		+3	-630	-987		-357
Ireland	-378	-302		+77	770	464		+306	-1106	-1323		-216
Italy	-717	-388		+329	465	481		-16	-675	-652		+23
Netherlands	-539	-427		+112	571	497		+74	-3243	-1851		+1391
Portugal	-498	-445		+53	544	405		+140	-2543	-2543		+0
Spain	-536	-323		+213	565	581		-16	-1942	-1697		+245
Sweden	-783	-444		+340	594	607		-13	-3333	-2756		+577
European Union	-601	-356		+245	607	473		+133	-2113	-1611		+502

SUMMARY OF SCENARIOS – MACRO EU COUNTRIES



A new feature of ST'23 is the addition of GVA shocks by sector to model idiosyncratic credit risk impacts.

High discrepancies in sectorial GVA by countries, with overall higher 3-year impact in Mining (-12.8), Manufacturing (-11.3% and -7.8% for high and low intensity), Utilities (-8.9%) and Transportation (-8.4%). Low Energy Net shock (-1.1%) due to very positive performance in 2025 (average of +34.1% impact).

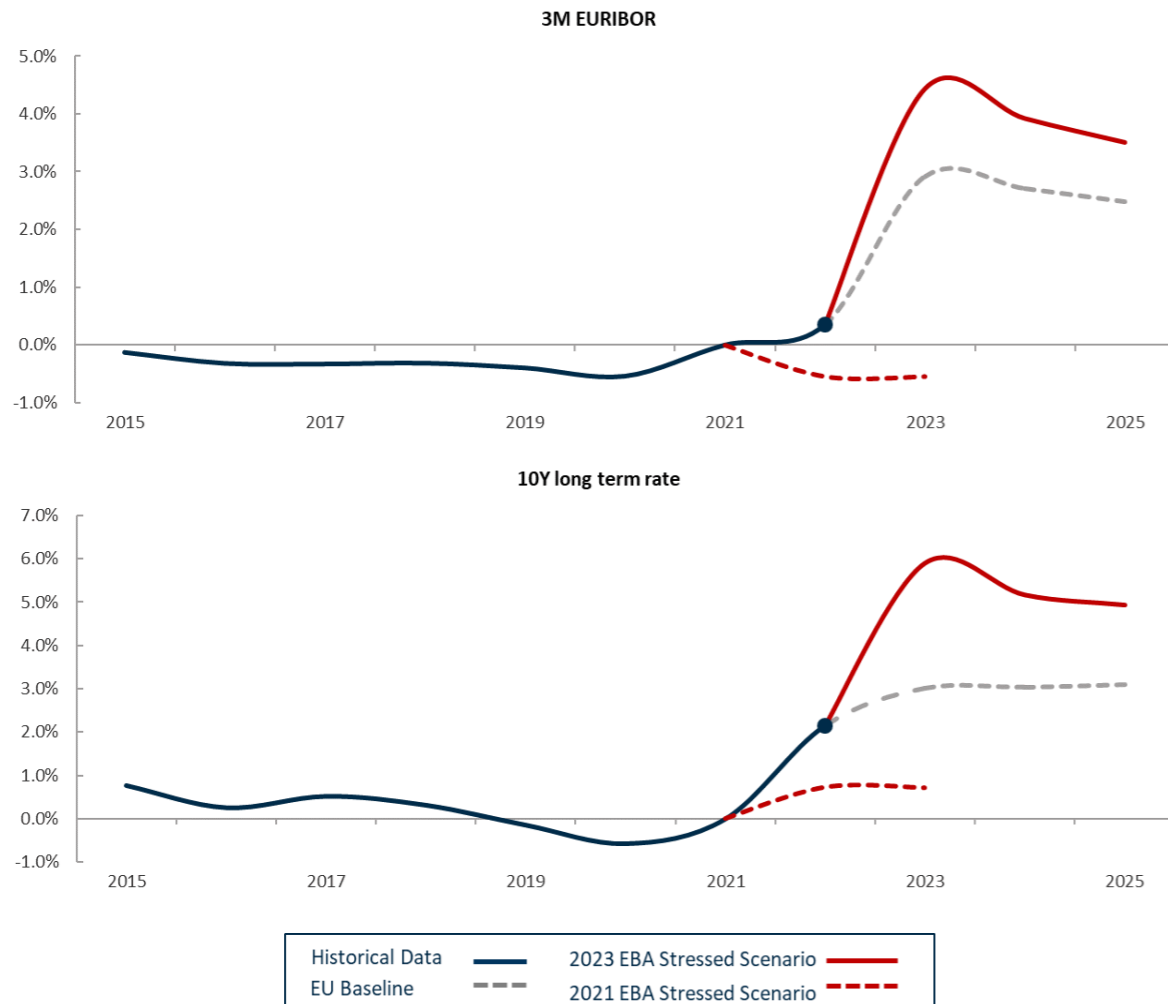
2023 Stress Test Macro Scenarios - GVA Growth								
		Actual	Adverse					
		2022	2023	2024	2025	Net Shock (3years)		
	Agriculture	-2.1%	-4.0%	-4.9%	1.1%	-7.8%		
	Mining	-3.4%	-10.1%	-12.5%	9.8%	-12.8%		
	Manufacturing-High Intensity	2.9%	-5.3%	-8.8%	2.8%	-11.3%		
	Manufacturing-Low Intensity	3.2%	-2.8%	-5.2%	0.2%	-7.8%		
	Energy	-3.4%	-13.7%	-21.5%	34.1%	-1.1%		
	Utilities	-3.4%	-5.8%	-4.3%	1.1%	-8.9%		
	Construction	2.5%	-3.9%	-3.8%	0.8%	-7.0%		
	Wholesale	7.5%	-3.5%	-3.7%	0.9%	-6.3%		
	Transportation	7.5%	-3.3%	-6.2%	1.1%	-8.4%		
	Accommodation	7.5%	0.8%	-4.5%	-0.3%	-4.0%		
	Communication	4.9%	-2.0%	-3.1%	0.8%	-4.3%		
	Financial Activities	0.8%	-3.1%	-2.8%	0.5%	-5.4%		
	Real Estate	1.7%	-3.1%	-1.7%	1.1%	-3.7%		
	Professional Activities	4.4%	-3.9%	-3.8%	0.5%	-7.3%		
	Public Administration	1.1%	-1.8%	-1.6%	1.4%	-2.0%		
	Entertainment	12.7%	1.4%	-2.7%	1.0%	-0.2%		

SUMMARY OF SCENARIOS – MARKET EU COUNTRIES



In the adverse scenario, 3M SWAP rate presents a significant increase in 2023, and slightly decreases in 2024-25. Same path is shown in long-term rate levels hits.

Sovereign spread shocks increase drastically in southern countries (+82bps in Greece, Italy, Portugal and Spain relative to ST'21 shocks) and remains flat in the rest (+1bps in France, Germany, Ireland and Netherlands).



Sov. credit spreads (Net shock) ¹			
	ST 2023	ST 2021	Difference (bps)
France	52	51	+1
Germany	52	51	+1
Greece	238	156	+82
Ireland	52	51	+1
Italy	238	156	+82
Netherlands	52	51	+1
Portugal	238	156	+82
Spain	238	156	+82

Note: (1) Net shocks reflect the total adverse effect to the macroeconomic indicator from 2020 levels (3-year shock), measured as bps

SUMMARY OF SCENARIOS – UK AND US

Much worse GDP, unemployment rate and Residential Real Estate (RRE) shocks for UK and US. For UK, shocks reaches 8.3%, 6.8% and 22% respectively, whereas for US the shocks hit 4.6%, 3% and 22% for the same macro variables. The scenario is more severe than the 2022 scenarios of the Bank of England and the Federal Reserve System, which in part reflects the use of updated data.

	GDP (Net shock) ¹			Unemployment (Net shock) ¹			House Price Index (Net shock) ¹		
	ST 2023	ST 2021	Difference (bps)	ST 2023	ST 2021	Difference (bps)	ST 2023	ST 2021	Difference (bps)
United Kingdom	-831	-414	+418	679	441	+238	-2172	-2328	-156
United States	-460	-373	+88	302	179	+124	-2172	-2328	-156



No FX impact for US and UK, either in baseline or adverse scenarios. Shocks in both countries lower than the implicit FX depreciation.

	FX (Net shock) ¹			Interest Rates Spread (implicit FX depreciation) ²			Interest Rate Disparity
	ST 2023	ST 2021	Difference (pp)	ST 2023	ST 2021	Difference (pp)	ST 2023
United Kingdom	0.0	0.0	+0.0	2.5	2.6	-0.1	-2.5
United States	0.0	0.0	+0.0	5.2	3.7	+1.5	-5.2

Note: (1) Net shocks reflect the total adverse effect to the macroeconomic indicator from 2022 levels (3-year shock), measured as bps
2023 EU Wide Stress Test Launch | February 2023

Scenario Analysis – Macro Economic Variables

EU COUNTRIES	
	EU
	• FRANCE
	• GERMANY
	• GREECE
	• IRELAND
	• ITALY
	• NETHERLANDS
	• PORTUGAL
	• SPAIN
	• SWEDEN

NON-EU COUNTRIES	
	• UK
	• US

SCENARIO ANALYSIS – COMPREHENSIVE GUIDE



FR

DE

GR

IE

IT

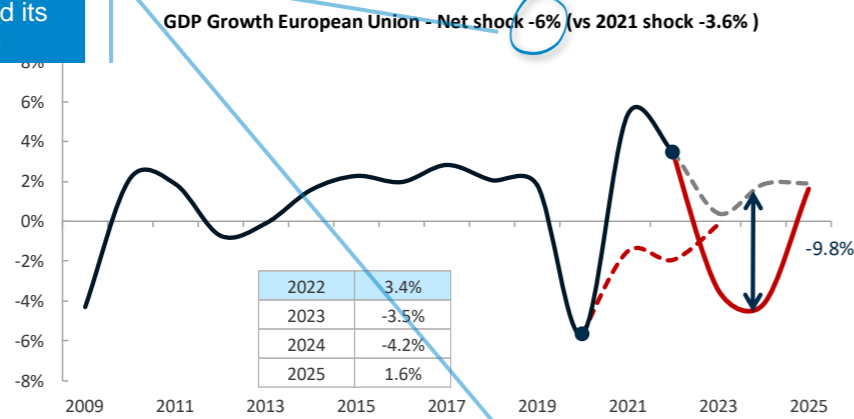
NL

PT

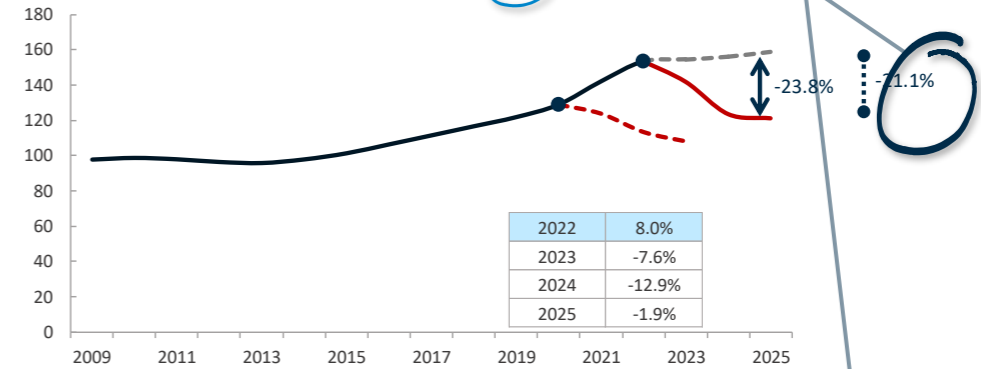
ES

SE

Net Shock : 2022 levels to stress
It is an indicator of the scenario severity and its impact in capital

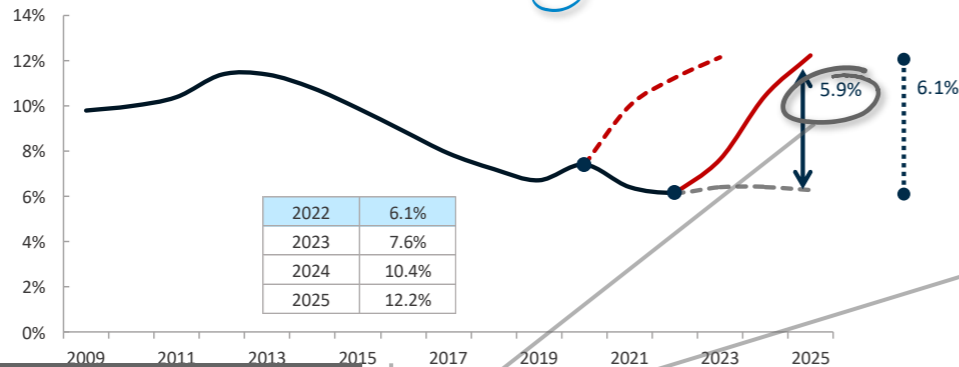


House Prices European Union - Net shock -21.1% (vs 2021 shock -16.1%)



Peak to trough: It is a through the cycle (historical) indicator of the confidence level implied in the scenario

Unemployment European Union - Net shock 6.1% (vs 2021 shock 4.7%)



2023 Stress Test Macro Scenarios vs 2021

	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-7.5%	-9.0%	6.1%	5.4%	-21.1%	-16.1%
# St Dev.	2.56	3.27	3.22	3.27	6.07	6.05
Confidence Level	99.47%	99.95%	99.94%	99.95%	100.00%	100.00%
Baseline Drop	-9.8%	-12.9%	5.9%	5.0%	-23.8%	-21.9%
# St Dev.	3.34	4.67	3.15	3.02	6.84	8.22
Confidence Level	99.96%	100.00%	99.92%	99.87%	100.00%	100.00%

Historical Data ————
EU Baseline Scenario - - - - -
2023 EBA Stressed Scenario ————
2021 EBA Stressed Scenario - - - - -

Baseline Drop: Baseline to stress
It is a forward looking indicator of the confidence level implied in the scenario

MACRO-SCENARIO ANALYSIS – EU COUNTRIES (1/2)



FR

DE

GR

IE

IT

NL

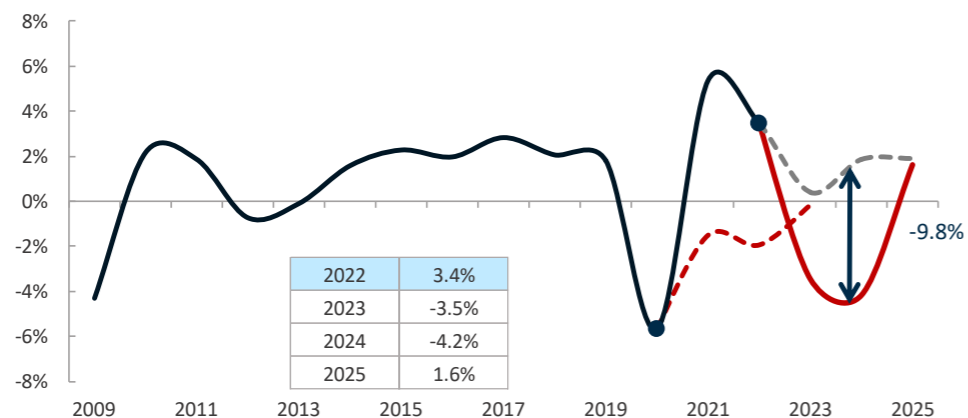
PT

ES

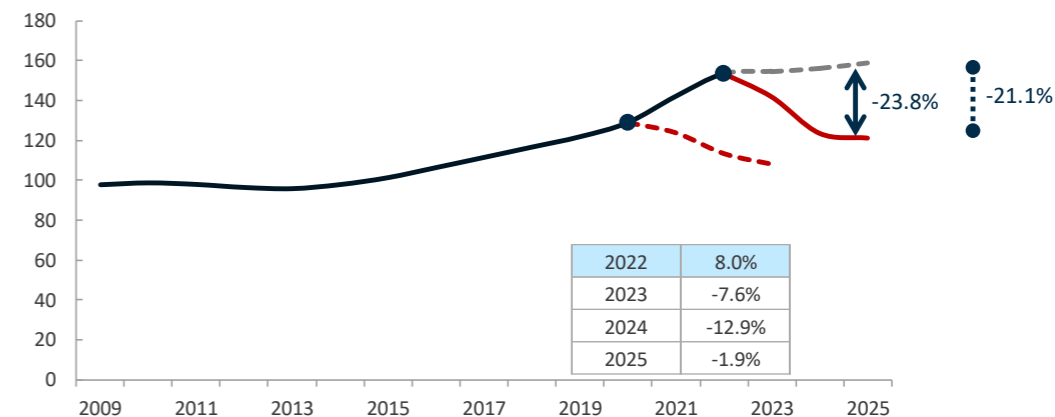
SE

The stress scenario for EU displays a much higher shocks versus ST'21 test for GDP (net shock of -6% and -3.6% respectively), Unemployment rate (6.1% vs. 4.7%) and HPI (-21.1% vs. -16.1%).

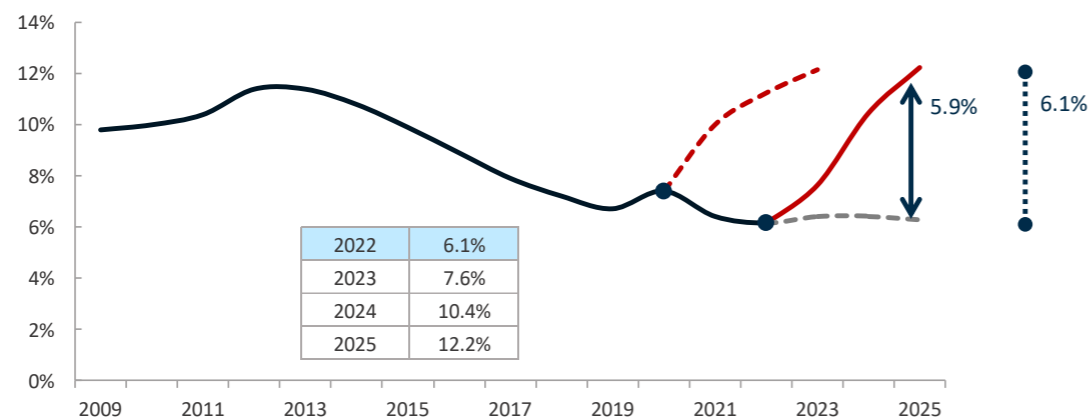
GDP Growth European Union - Net shock -6% (vs 2021 shock -3.6%)



House Prices European Union - Net shock -21.1% (vs 2021 shock -16.1%)



Unemployment European Union - Net shock 6.1% (vs 2021 shock 4.7%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-7.5%	-9.0%	6.1%	5.4%	-21.1%	-16.1%
# St Dev.	2.56	3.27	3.22	3.27	6.07	6.05
Confidence Level	99.47%	99.95%	99.94%	99.95%	100.00%	100.00%
Baseline Drop	-9.8%	-12.9%	5.9%	5.0%	-23.8%	-21.9%
# St Dev.	3.34	4.67	3.15	3.02	6.84	8.22
Confidence Level	99.96%	100.00%	99.92%	99.87%	100.00%	100.00%

Historical Data

EU Baseline Scenario



2023 EBA Stressed Scenario

2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – EU COUNTRIES (2/2)



FR

DE

GR

IE

IT

NL

PT

ES

SE

The scenarios narrative shows geopolitical tensions leading to stagflation, with increased energy prices and production costs, further supply chain disruptions worldwide, inflation persistently high and pressures on economic activity.

High discrepancies in sectorial GVA by countries, with overall higher 3-year impact in Mining (-12.8), Manufacturing (-11.3% and -7.8% for high and low intensity), Utilities (-8.9%) and Transportation (-8.4%). Low Energy Net shock (-1.1%) due to very positive performance in 2025 (average of +34.1% impact).

2023 Stress Test Macro Scenarios - GVA Growth										
		Actual		Adverse						
		2022	2023	2024	2025	Net Shock (3years)				
	Agriculture	-2.1%	-4.0%	-4.9%	1.1%	-7.8%				
	Mining	-3.4%	-10.1%	-12.5%	9.8%	-12.8%				
	Manufacturing-High Intensity	2.9%	-5.3%	-8.8%	2.8%	-11.3%				
	Manufacturing-Low Intensity	3.2%	-2.8%	-5.2%	0.2%	-7.8%				
	Energy	-3.4%	-13.7%	-21.5%	34.1%	-1.1%				
	Utilities	-3.4%	-5.8%	-4.3%	1.1%	-8.9%				
	Construction	2.5%	-3.9%	-3.8%	0.8%	-7.0%				
	Wholesale	7.5%	-3.5%	-3.7%	0.9%	-6.3%				
	Transportation	7.5%	-3.3%	-6.2%	1.1%	-8.4%				
	Accommodation	7.5%	0.8%	-4.5%	-0.3%	-4.0%				
	Communication	4.9%	-2.0%	-3.1%	0.8%	-4.3%				
	Financial Activities	0.8%	-3.1%	-2.8%	0.5%	-5.4%				
	Real Estate	1.7%	-3.1%	-1.7%	1.1%	-3.7%				
	Professional Activities	4.4%	-3.9%	-3.8%	0.5%	-7.3%				
	Public Administration	1.1%	-1.8%	-1.6%	1.4%	-2.0%				
	Entertainment	12.7%	1.4%	-2.7%	1.0%	-0.2%				

MACRO-SCENARIO ANALYSIS – FRANCE (1/2)

EU



DE

GR

IE

IT

NL

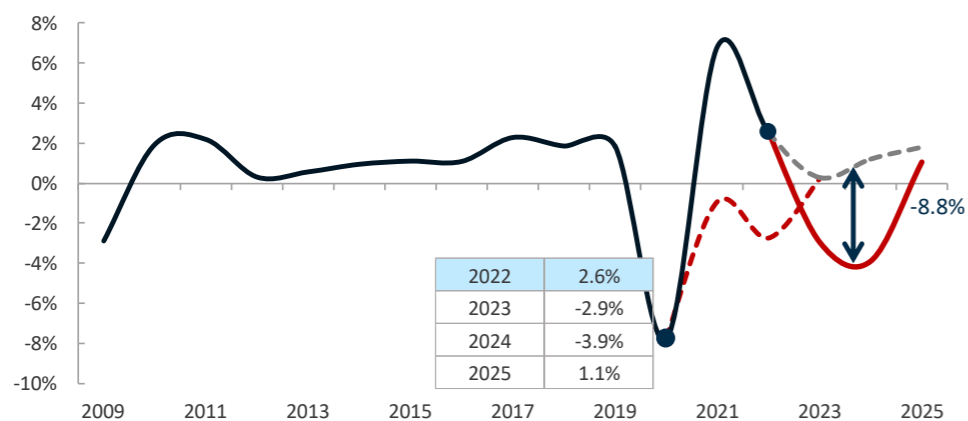
PT

ES

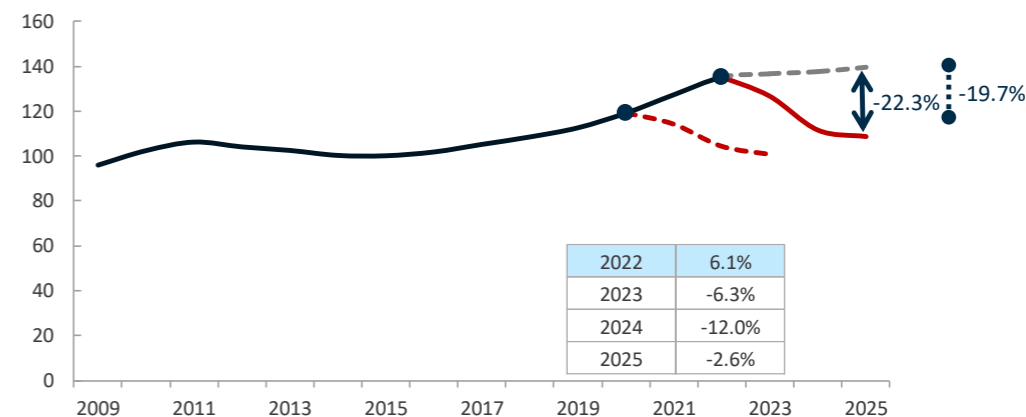
SE

In France, much worse scenario compared to ST'21 in the main 3 macro variables: GDP (net shock of -5.7% and -3.4% respectively), Unemployment rate increases (5.9% vs. 4.4%) and HPI (-19.7% vs. -15.4%). Slightly lower shocks as compared to average EU ones.

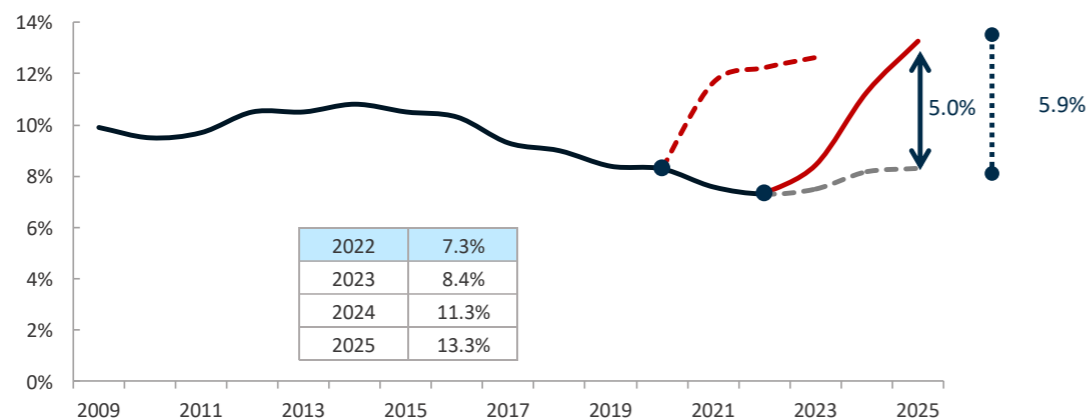
GDP Growth France - Net shock -5.7% (vs 2021 shock -3.4%)



House Prices France - Net shock -19.7% (vs 2021 shock -15.4%)



Unemployment France - Net shock 5.9% (vs 2021 shock 4.4%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-6.7%	-11.1%	5.9%	4.4%	-19.7%	-15.4%
# St Dev.	2.09	3.85	5.25	5.15	5.96	4.91
Confidence Level	98.17%	99.99%	100.00%	100.00%	100.00%	100.00%
Baseline Drop	-8.8%	-14.2%	5.0%	3.7%	-22.3%	-16.9%
# St Dev.	2.73	4.91	4.37	4.41	6.74	5.40
Confidence Level	99.68%	100.00%	100.00%	100.00%	100.00%	100.00%

Historical Data ———— 2023 EBA Stressed Scenario ————
 EU Baseline Scenario - - - - - 2021 EBA Stressed Scenario - - - - -

MACRO-SCENARIO ANALYSIS – FRANCE (2/2)

EU



DE

GR

IE

IT

NL

PT

ES

SE

France shows high discrepancies in GVA by sectors, with highest impact on Mining (-19.9%), Manufacturing-high intensity (-13.7%) and Utilities (-11.5%). Very low impact on services-related sectors.

2023 Stress Test Macro Scenarios - GVA Growth									
		Actual	Adverse						
		2022	2023	2024	2025	Net Shock (3years)			
	Agriculture	1.2%	-3.8%	-5.1%	0.4%	-8.4%			
	Mining	-16.6%	-11.3%	-8.1%	-0.5%	-19.9%			
	Manufacturing-High Intensity	2.0%	-5.4%	-9.5%	1.2%	-13.7%			
	Manufacturing-Low Intensity	1.1%	-3.0%	-5.4%	-0.2%	-8.5%			
	Energy	-16.6%	-16.0%	-23.8%	34.3%	-5.5%			
	Utilities	-16.6%	-8.5%	-3.6%	0.7%	-11.5%			
	Construction	-0.4%	-1.8%	-2.8%	0.6%	-4.0%			
	Wholesale	7.1%	-3.3%	-3.5%	0.7%	-6.1%			
	Transportation	7.1%	-3.1%	-6.3%	0.0%	-9.3%			
	Accommodation	7.1%	1.0%	-4.9%	-1.4%	-5.4%			
	Communication	5.9%	-0.6%	-2.9%	0.8%	-2.7%			
	Financial Activities	2.2%	-1.8%	-2.1%	0.9%	-3.0%			
	Real Estate	1.1%	-3.3%	-2.2%	0.6%	-4.8%			
	Professional Activities	2.8%	-4.2%	-4.1%	0.2%	-8.2%			
	Public Administration	1.0%	-1.7%	-1.7%	0.8%	-2.5%			
	Entertainment	20.2%	0.6%	-3.0%	0.6%	-1.9%			

MACRO-SCENARIO ANALYSIS – GERMANY (1/2)

EU

FR



GR

IE

IT

NL

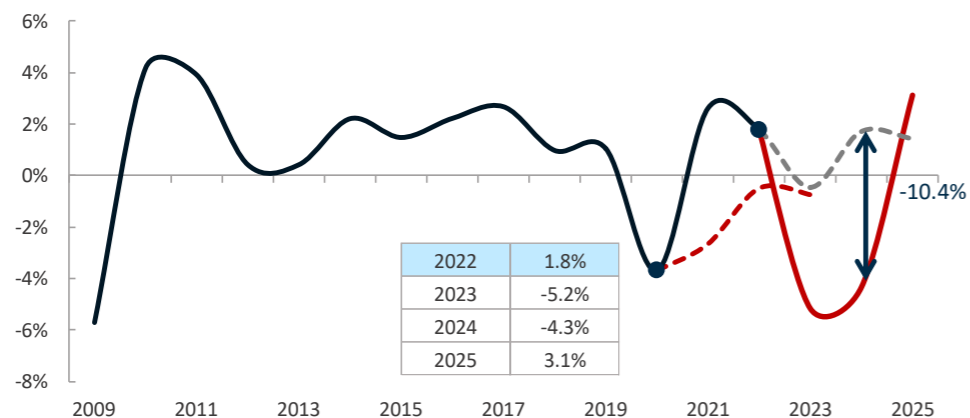
PT

ES

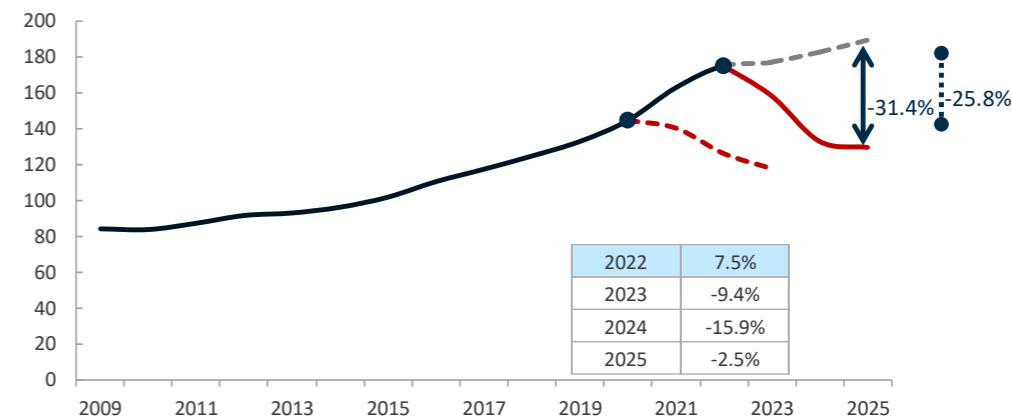
SE

Much worse scenario compared to ST'21 in GDP (net shock of -6.4% and -3.9% respectively) and HPI (-25.8% vs. -18.5%). These shocks are not compensated by the lower impact on Unemployment Rate, slightly better vs. ST'21 (4.1% and 4.8% respectively).

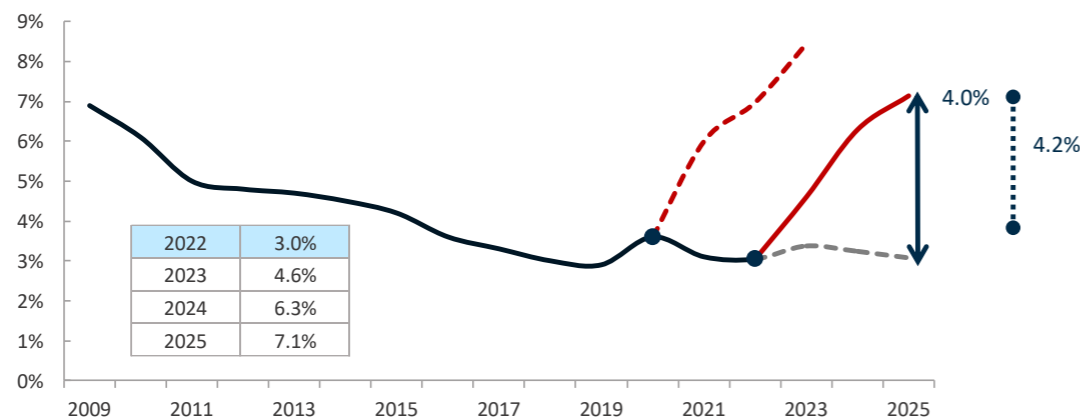
GDP Growth Germany - Net shock -6.4% (vs 2021 shock -3.9%)



House Prices Germany - Net shock -25.8% (vs 2021 shock -18.5%)



Unemployment Germany - Net shock 4.1% (vs 2021 shock 4.8%)



2023 Stress Test Macro Scenarios vs 2021						
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-9.3%	-7.4%	4.2%	5.5%	-25.8%	-18.5%
# St Dev.	3.43	2.57	3.46	4.53	7.76	6.66
Confidence Level	99.97%	99.49%	99.97%	100.00%	100.00%	100.00%
Baseline Drop	-10.4%	-12.2%	4.0%	4.9%	-31.4%	-28.7%
# St Dev.	3.84	4.22	3.31	4.01	9.44	10.35
Confidence Level	99.99%	100.00%	99.95%	100.00%	100.00%	100.00%

Historical Data

EU Baseline Scenario



2023 EBA Stressed Scenario

2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – GERMANY (2/2)

EU

FR



GR

IE

IT

NL

PT

ES

SE

Germany shows high discrepancies in GVA by sectors, as well as different performance as compared to average EU. High positive GVA impact on Energy (+19.1%) due to the high recovery in 2025 (+69%). Similar behavior on Mining, where the positive 2025 performance (+38.7%) leads to a net shock of -2.9%, much lower vs. EU average. Worst net impact on Professional Activities (-10.8%) and Manufacturing (c. -9%).

2023 Stress Test Macro Scenarios - GVA Growth							
	Actual	Adverse					Net Shock (3years)
		2022	2023	2024	2025		
Agriculture	-4.4%	-4.8%	-5.8%	3.7%	-6.9%		
Mining	-0.4%	-16.0%	-25.6%	38.7%	-2.9%		
Manufacturing-High Intensity	-0.4%	-7.4%	-7.8%	6.2%	-9.0%		
Manufacturing-Low Intensity	1.7%	-5.5%	-5.6%	1.8%	-9.3%		
Energy	-0.4%	-17.4%	-32.8%	69.3%	19.1%		
Utilities	-0.4%	-5.2%	-4.4%	2.5%	-7.1%		
Construction	-2.7%	-7.0%	-3.7%	1.8%	-8.9%		
Wholesale	4.9%	-5.3%	-4.4%	1.9%	-7.8%		
Transportation	4.9%	-5.0%	-5.9%	3.4%	-7.5%		
Accommodation	4.9%	0.0%	-4.7%	1.0%	-3.7%		
Communication	2.3%	-4.3%	-3.1%	1.6%	-5.9%		
Financial Activities	4.5%	-4.2%	-4.2%	0.1%	-8.2%		
Real Estate	0.5%	-4.2%	-1.4%	1.5%	-4.1%		
Professional Activities	2.1%	-6.9%	-4.6%	0.7%	-10.8%		
Public Administration	2.8%	-0.8%	-0.6%	2.2%	0.8%		
Entertainment	7.5%	0.4%	-1.8%	1.5%	0.1%		

MACRO-SCENARIO ANALYSIS – GREECE (1/2)

EU

FR

DE



IE

IT

NL

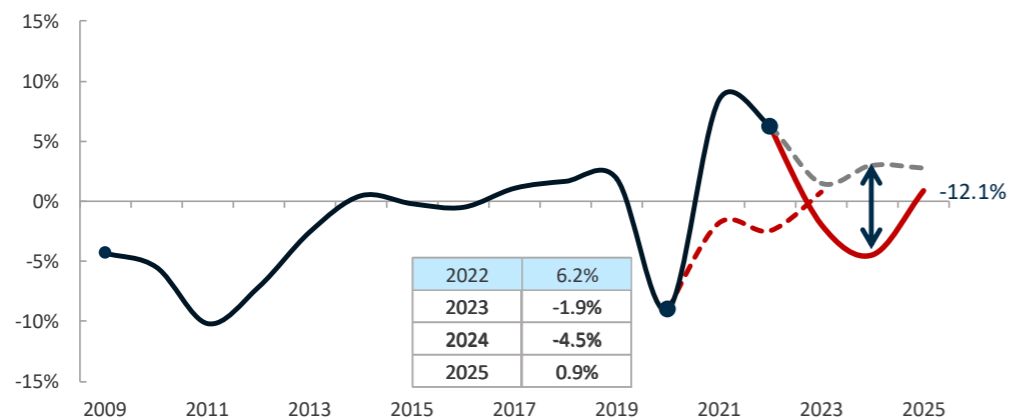
PT

ES

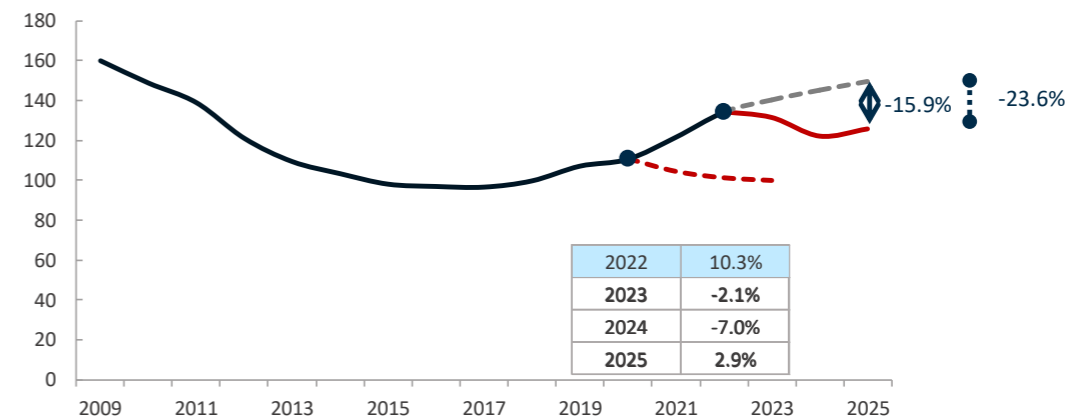
SE

In Greece, main macro variables are less penalized compared to EU average: GDP (-5.5%) and HPI (-6.3%). Unemployment rate remains almost flat vs. ST'21 (4.8% and 4.7% respectively).

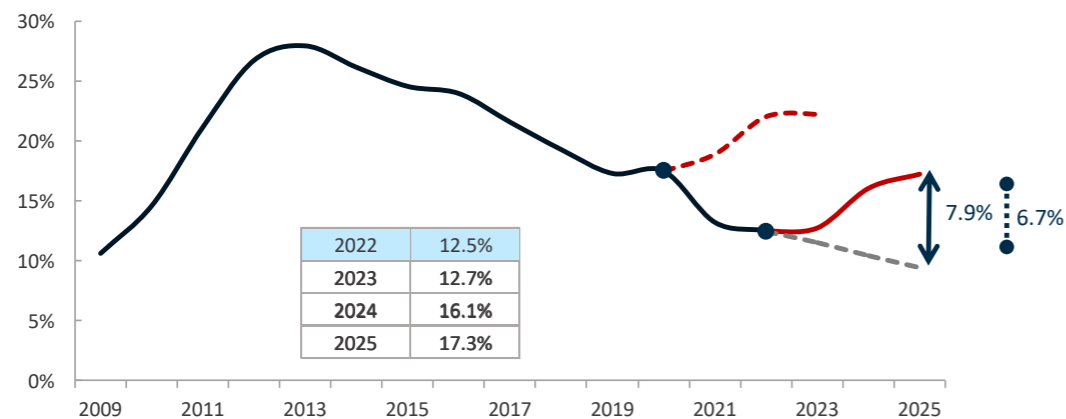
GDP Growth Greece - Net shock -5.5% (vs 2021 shock -3.6%)



House Prices Greece - Net shock -6.3% (vs 2021 shock -9.9%)



Unemployment Greece - Net shock 4.8% (vs 2021 shock 4.7%)



2023 Stress Test Macro Scenarios vs 2021						
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-21.1%	-30.0%	6.7%	11.6%	-23.6%	-37.6%
# St Dev.	3.90	7.03	1.17	2.19	3.16	6.15
Confidence Level	100.00%	100.00%	87.84%	98.59%	99.92%	100.00%
Baseline Drop	-12.1%	-14.8%	7.9%	8.3%	-15.9%	-16.5%
# St Dev.	2.23	3.47	1.38	1.57	2.13	2.70
Confidence Level	98.71%	99.97%	91.57%	94.16%	98.36%	99.66%

Historical Data
EU Baseline Scenario



2023 EBA Stressed Scenario
2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – GREECE (2/2)

EU

FR

DE



IE

IT

NL

PT

ES

SE

Higher GVA impacts compared to EU average. Most impacted sectors are Manufacturing – high intensity (-22.7%), Mining (-14.8%) and Transportation (-10.4%).

2023 Stress Test Macro Scenarios - GVA Growth									
		Actual	Adverse						
		2022	2023	2024	2025	Net Shock (3years)			
	Agriculture	-0.8%	-3.1%	-5.1%	-0.1%	-8.3%			
	Mining	1.5%	-4.6%	-8.6%	-1.6%	-14.8%			
	Manufacturing-High Intensity	3.9%	-6.9%	-15.3%	-0.5%	-22.7%			
	Manufacturing-Low Intensity	6.8%	-3.0%	-7.5%	-0.5%	-11.0%			
	Energy	1.5%	-2.2%	-9.8%	4.2%	-7.7%			
	Utilities	1.5%	-0.7%	-5.8%	0.8%	-5.7%			
	Construction	15.8%	-0.8%	-6.3%	0.5%	-6.6%			
	Wholesale	14.0%	-1.7%	-4.8%	1.0%	-5.5%			
	Transportation	14.0%	-2.8%	-7.4%	-0.2%	-10.4%			
	Accommodation	14.0%	0.0%	-3.7%	1.4%	-2.3%			
	Communication	2.8%	0.1%	-3.8%	0.7%	-3.0%			
	Financial Activities	-3.9%	1.7%	-2.3%	0.8%	0.2%			
	Real Estate	0.0%	-0.4%	-1.1%	2.3%	0.9%			
	Professional Activities	8.4%	-1.3%	-4.2%	0.1%	-5.4%			
	Public Administration	-1.5%	-1.9%	-1.6%	0.6%	-2.9%			
	Entertainment	22.6%	-3.0%	-2.4%	0.5%	-4.9%			

MACRO-SCENARIO ANALYSIS – IRELAND (1/2)

EU

FR

DE

GR



IT

NL

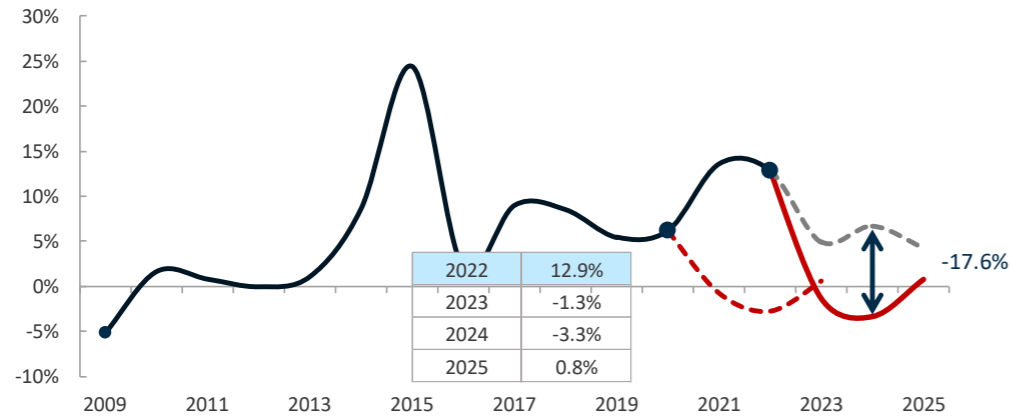
PT

ES

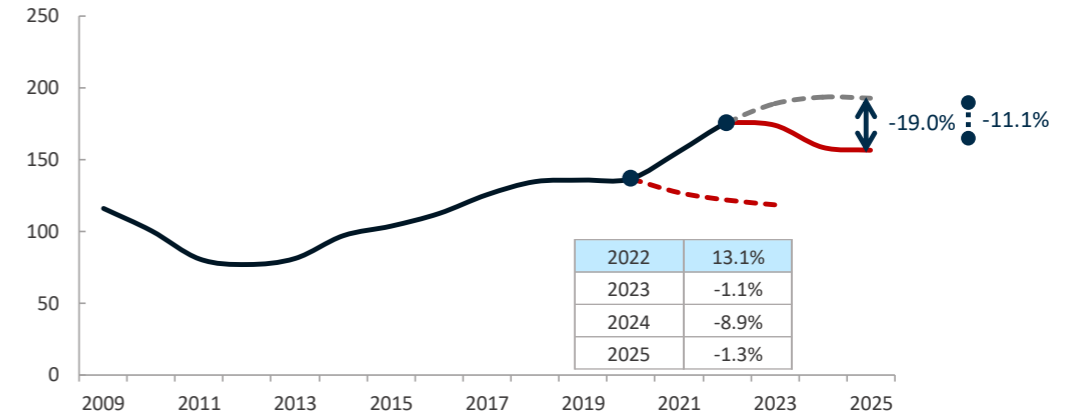
SE

Ireland is one of the less shocked EU countries. GDP 3-year net shock decreases -3.8% ST'23 vs. -3% ST'21. Unemployment stress goes from 4.6% to 7.7% and HPI shock goes from -13.2% to -11.1% in ST'23. However, Ireland is the country with the highest GDP impact when comparing Baseline vs Adverse scenario.

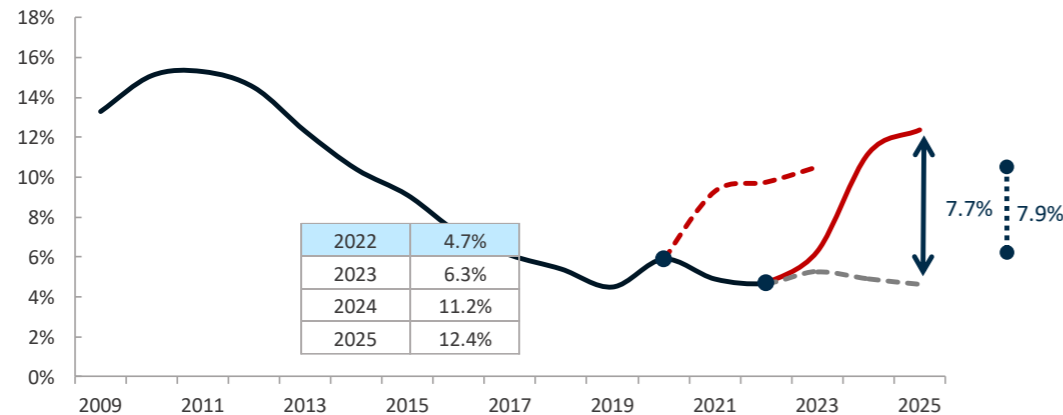
GDP Growth Ireland - Net shock -3.8% (vs 2021 shock -3%)



House Prices Ireland - Net shock -11.1% (vs 2021 shock -13.2%)



Unemployment Ireland - Net shock 7.7% (vs 2021 shock 4.6%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-4.6%	-3.6%	7.9%	6.0%	-11.1%	-13.2%
# St Dev.	0.62	0.48	1.88	1.48	0.99	1.18
Confidence Level	73.20%	68.56%	97.00%	93.09%	84.00%	88.01%
Baseline Drop	-17.6%	-12.8%	7.7%	3.7%	-19.0%	-7.9%
# St Dev.	2.38	1.74	1.85	0.92	1.71	0.70
Confidence Level	99.14%	95.88%	96.79%	82.01%	95.62%	75.91%

Historical Data
EU Baseline Scenario



2023 EBA Stressed Scenario
2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – IRELAND (2/2)

EU

FR

DE

GR



IT

NL

PT

ES

SE

Most impacted sectors in Ireland are Manufacturing – high intensity (-38.9%), Utilities (-36.5%) and Energy (-35.1%). The shocks presented in these three sectors are the most severe across all sectors in the EU countries.

2023 Stress Test Macro Scenarios - GVA Growth									
		Actual	Adverse						
		2022	2023	2024	2025	Net Shock (3years)			
	Agriculture	11.5%	4.4%	-2.5%	2.1%	3.9%			
	Mining	-25.2%	-36.8%	-7.0%	5.0%	-38.9%			
	Manufacturing-High Intensity	21.3%	3.6%	-4.5%	2.4%	1.5%			
	Manufacturing-Low Intensity	20.1%	3.7%	-3.7%	0.1%	0.1%			
	Energy	-25.2%	-38.1%	-10.5%	13.4%	-35.1%			
	Utilities	-25.2%	-35.2%	-3.0%	1.7%	-36.5%			
	Construction	14.7%	-0.6%	-3.4%	0.7%	-3.3%			
	Wholesale	9.8%	-2.6%	-5.1%	-1.1%	-8.8%			
	Transportation	9.8%	-2.5%	-5.8%	-0.2%	-8.5%			
	Accommodation	9.8%	-2.9%	-6.4%	-1.2%	-10.5%			
	Communication	11.4%	-2.4%	-0.6%	2.1%	-0.8%			
	Financial Activities	2.9%	-5.5%	-5.0%	-0.7%	-11.2%			
	Real Estate	4.7%	1.7%	1.2%	2.3%	5.2%			
	Professional Activities	2.2%	-2.7%	-2.2%	0.4%	-4.5%			
	Public Administration	2.3%	-2.8%	-6.4%	-1.4%	-10.7%			
	Entertainment	15.6%	-0.4%	-4.6%	0.1%	-4.8%			

MACRO-SCENARIO ANALYSIS – ITALY (1/2)

EU

FR

DE

GR

IE



NL

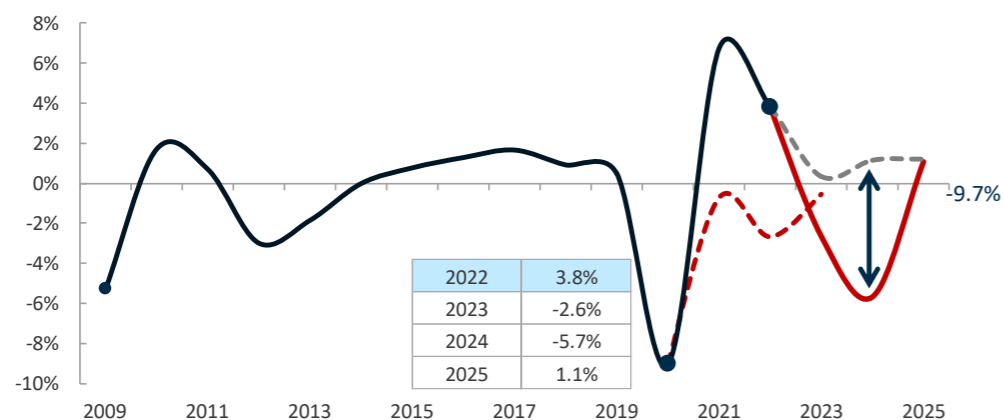
PT

ES

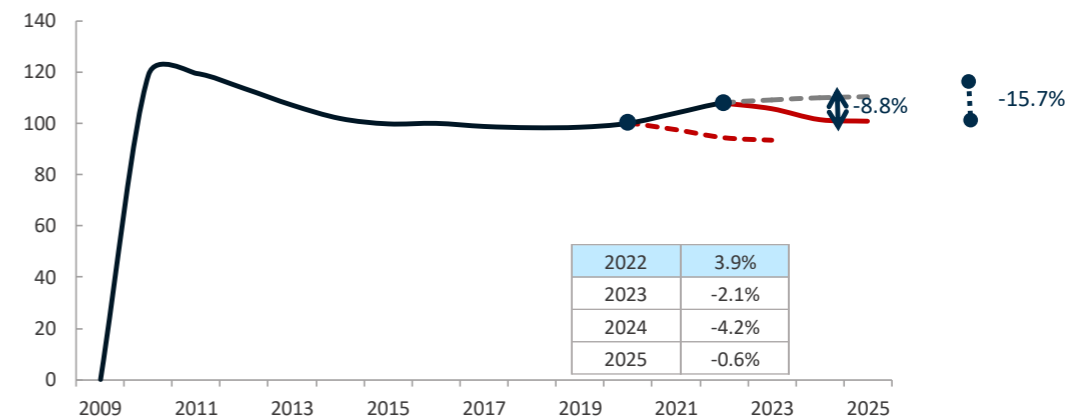
SE

Italy presents much worse impacts vs. ST'21 on GDP net shock (-7.2% vs. -3.9%), and almost the same impact in the Unemployment rate and the HPI (4.7% vs 4.8% and -6.8% vs. -6.5%, respectively). The GDP shock is above the EU average.

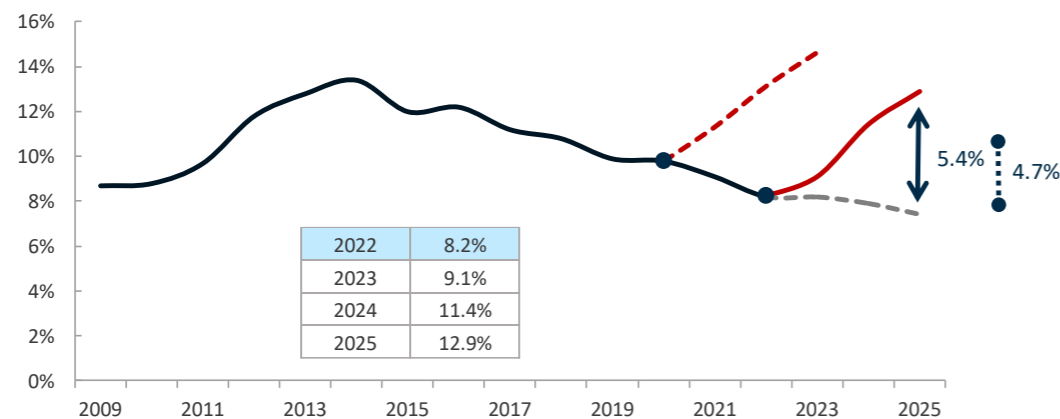
GDP Growth Italy - Net shock -7.2% (vs 2021 shock -3.9%)



House Prices Italy - Net shock -6.8% (vs 2021 shock -6.5%)



Unemployment Italy - Net shock 4.7% (vs 2021 shock 4.8%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-8.2%	-12.6%	4.7%	5.9%	-15.7%	-21.8%
# St Dev.	2.13	3.80	2.80	3.80	4.89	8.37
Confidence Level	98.34%	99.99%	99.75%	99.99%	100.00%	100.00%
Baseline Drop	-9.7%	-12.6%	5.4%	5.1%	-8.8%	-8.4%
# St Dev.	2.52	3.80	3.28	3.28	2.72	3.22
Confidence Level	99.41%	99.99%	99.95%	99.95%	99.68%	99.94%

Historical Data

EU Baseline Scenario



2023 EBA Stressed Scenario

2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – ITALY (2/2)

EU

FR

DE

GR

IE



NL

PT

ES

SE

The sectorial shock in Italy shows high differences across sectors. Manufacturing – high and low intensity are the sectors with the highest impact (-15.9% and -10.4% respectively). Energy is the only sector with a positive net shock, explained by the high 2025 recovery (+55%).

2023 Stress Test Macro Scenarios - GVA Growth								
		Actual	Adverse					
		2022	2023	2024	2025	Net Shock (3years)		
	Agriculture	-0.9%	-4.2%	-5.8%	0.7%	-9.2%		
	Mining	-0.7%	-8.1%	-20.7%	24.8%	-3.9%		
	Manufacturing-High Intensity	1.3%	-4.9%	-12.4%	1.4%	-15.9%		
	Manufacturing-Low Intensity	1.5%	-2.4%	-6.9%	-1.1%	-10.4%		
	Energy	-0.7%	-12.5%	-34.3%	55.0%	8.2%		
	Utilities	-0.7%	-4.3%	-6.0%	0.7%	-9.6%		
	Construction	10.7%	-3.4%	-6.2%	-0.5%	-10.2%		
	Wholesale	8.7%	-1.7%	-4.6%	0.1%	-6.1%		
	Transportation	8.7%	-1.7%	-7.7%	0.8%	-8.6%		
	Accommodation	8.7%	-0.6%	-5.4%	0.5%	-5.6%		
	Communication	3.1%	-1.0%	-3.5%	0.3%	-4.2%		
	Financial Activities	-4.8%	-3.2%	-3.4%	-0.3%	-6.9%		
	Real Estate	4.7%	-2.3%	-1.5%	0.8%	-3.0%		
	Professional Activities	3.2%	-3.2%	-5.0%	-0.2%	-8.4%		
	Public Administration	0.8%	-2.1%	-3.3%	0.8%	-4.6%		
	Entertainment	7.9%	-0.7%	-3.8%	1.3%	-3.3%		

MACRO-SCENARIO ANALYSIS – NETHERLANDS (1/2)

EU

FR

DE

GR

IE

IT



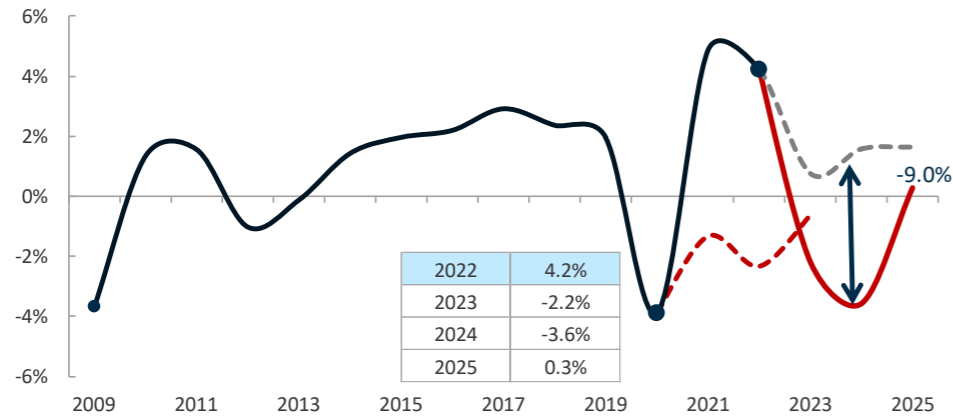
PT

ES

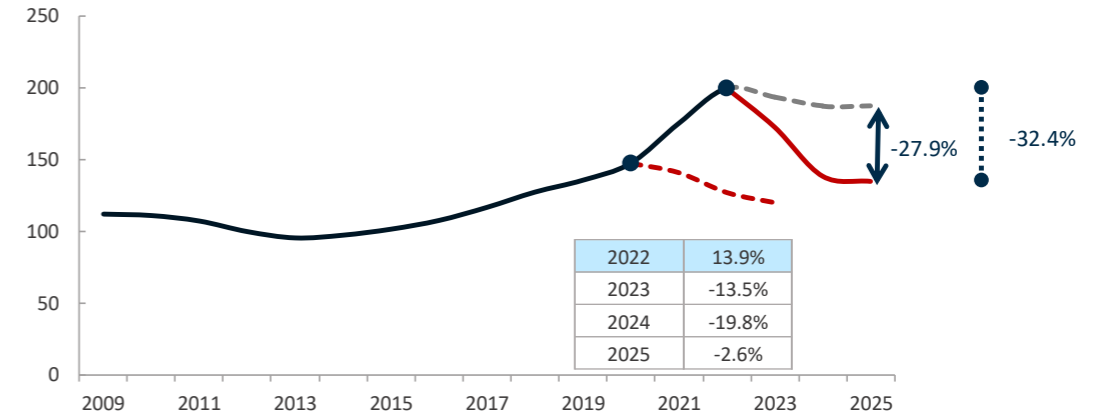
SE

As compared to ST'21, net shock for GDP is more severe (-5.4% vs. -4.3%), similarly to unemployment rate (5.7% vs. 5%). HPI shock is the highest one compared to EU countries (-32.4% vs. -18.5%), with the worst growth rate of -19.8% in 2024.

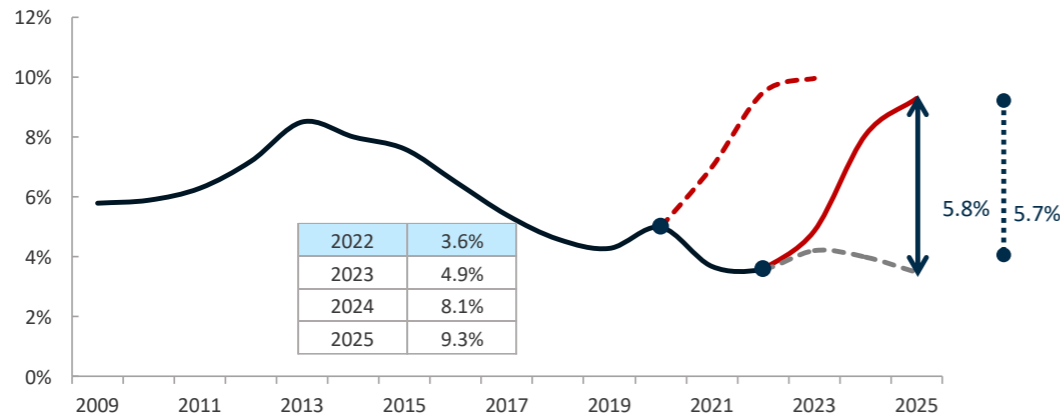
GDP Growth Netherlands - Net shock -5.4% (vs 2021 shock -4.3%)



House Prices Netherlands - Net shock -32.4% (vs 2021 shock -18.5%)



Unemployment Netherlands - Net shock 5.7% (vs 2021 shock 5%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-5.7%	-8.0%	5.7%	5.7%	-32.4%	-18.5%
# St Dev.	2.21	3.47	3.66	4.20	4.36	3.21
Confidence Level	98.64%	99.97%	99.99%	100.00%	100.00%	99.93%
Baseline Drop	-9.0%	-11.3%	5.8%	5.4%	-27.9%	-22.9%
# St Dev.	3.53	4.91	3.72	3.98	3.76	3.97
Confidence Level	99.98%	100.00%	99.99%	100.00%	99.99%	100.00%

Historical Data

EU Baseline Scenario



2023 EBA Stressed Scenario

2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – NETHERLANDS (2/2)

EU

FR

DE

GR

IE

IT



PT

ES

SE

Netherlands shows a negative net shock in almost all sectors, with the highest impact in most of them presented in 2024; however, this behavior is mostly aligned with the EU average. Mining and Manufacturing – high intensity are the sectors with the highest shock (-13.4% and -10.4% respectively).

2023 Stress Test Macro Scenarios - GVA Growth						
	Actual	Adverse				Net Shock (3years)
		2022	2023	2024	2025	
Agriculture	-0.7%	-1.9%	-4.5%	-1.0%	-7.4%	
Mining	2.9%	-5.9%	-10.2%	2.7%	-13.4%	
Manufacturing-High Intensity	4.1%	-3.8%	-6.5%	-0.1%	-10.4%	
Manufacturing-Low Intensity	2.5%	-2.0%	-4.7%	0.0%	-6.7%	
Energy	2.9%	-3.0%	-8.0%	7.8%	-3.2%	
Utilities	2.9%	-2.2%	-4.6%	0.2%	-6.7%	
Construction	2.1%	-3.3%	-3.6%	0.8%	-6.2%	
Wholesale	7.0%	-3.0%	-3.4%	0.1%	-6.4%	
Transportation	7.0%	-2.5%	-5.8%	-0.5%	-8.8%	
Accommodation	7.0%	6.2%	-8.0%	-3.6%	-5.4%	
Communication	3.9%	-0.8%	-4.3%	0.4%	-4.8%	
Financial Activities	-3.0%	-4.8%	-2.9%	-0.1%	-7.8%	
Real Estate	3.9%	-1.3%	-1.9%	0.4%	-2.7%	
Professional Activities	7.8%	-3.3%	-4.6%	-0.4%	-8.3%	
Public Administration	2.1%	-0.4%	-0.3%	1.1%	0.4%	
Entertainment	34.5%	6.4%	-4.8%	-0.3%	1.3%	

MACRO-SCENARIO ANALYSIS – PORTUGAL (1/2)

EU

FR

DE

GR

IE

IT

NL

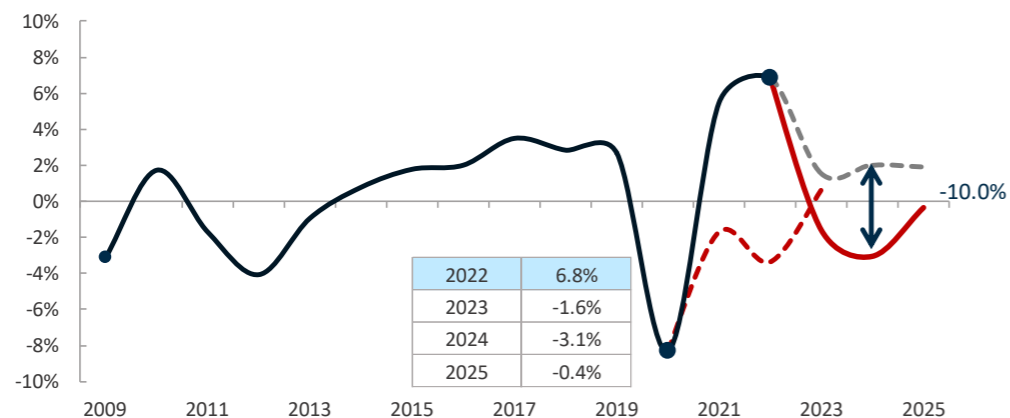


ES

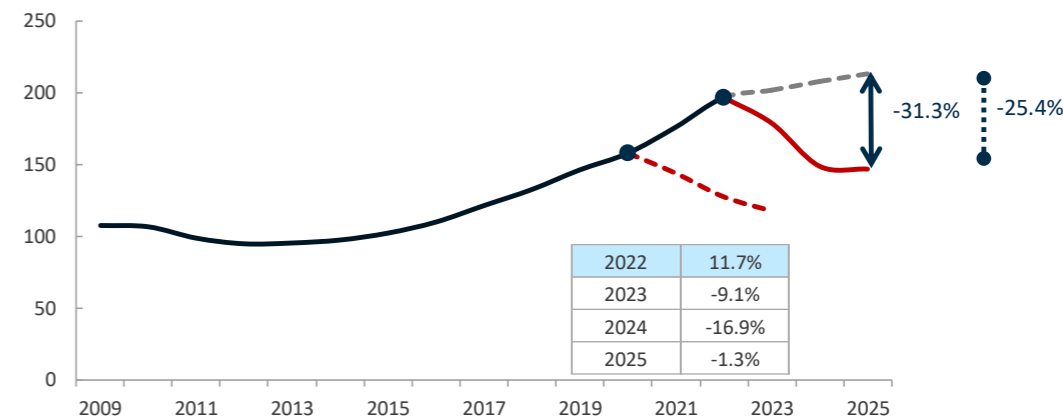
SE

Slightly worse projections for Portugal compared to ST'21. While GDP and Unemployment shocks are slightly more severe (-5% vs. -4.5% and 5.4% vs. 4% respectively) HPI net shock remains flat compared to ST'21 (-25.4%).

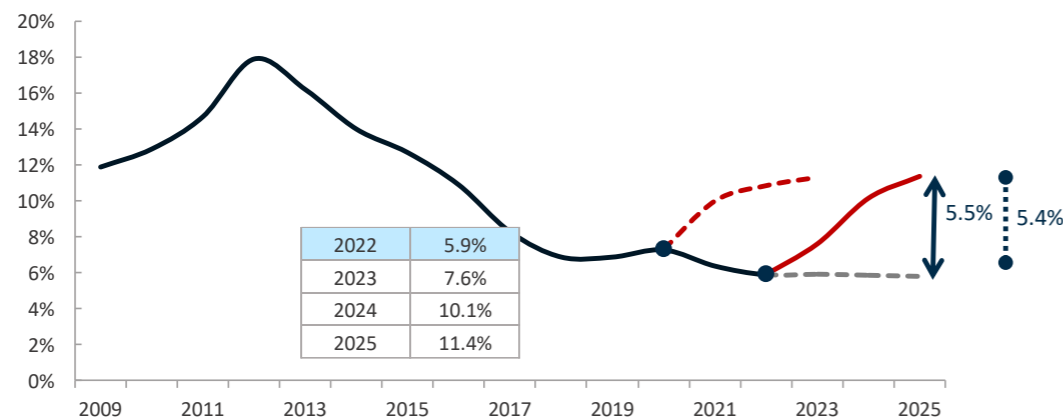
GDP Growth Portugal - Net shock -5% (vs 2021 shock -4.5%)



House Prices Portugal - Net shock -25.4% (vs 2021 shock -25.4%)



Unemployment Portugal - Net shock 5.4% (vs 2021 shock 4%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-5.0%	-12.9%	5.4%	4.4%	-25.4%	-25.4%
# St Dev.	1.25	3.66	1.37	1.19	4.02	4.16
Confidence Level	89.36%	99.99%	91.42%	88.34%	100.00%	100.00%
Baseline Drop	-10.0%	-14.1%	5.5%	3.9%	-31.3%	-28.4%
# St Dev.	2.50	4.00	1.37	1.06	4.94	4.65
Confidence Level	99.38%	100.00%	91.54%	85.51%	100.00%	100.00%

Historical Data

EU Baseline Scenario



2023 EBA Stressed Scenario

2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – PORTUGAL (2/2)

EU

FR

DE

GR

IE

IT

NL



ES

SE

All sectors present a negative net shock, being Mining is the sector with the highest impact (-13.9%).

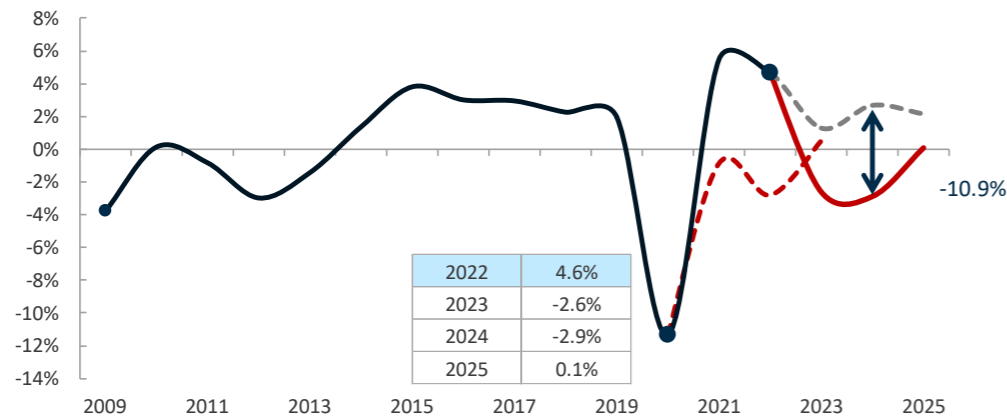
2023 Stress Test Macro Scenarios - GVA Growth										
		Actual		Adverse						
		2022	2023	2023	2024	2025	2025	Net Shock (3years)		
	Agriculture	-5.8%	-4.0%	-3.8%	-3.8%	-1.1%	-9.0%			
	Mining	-3.7%	-4.6%	-6.2%	-6.2%	-3.1%	-13.9%			
	Manufacturing-High Intensity	4.2%	-2.3%	-3.7%	-3.7%	-1.5%	-7.5%			
	Manufacturing-Low Intensity	5.7%	-2.5%	-4.6%	-4.6%	-1.7%	-8.8%			
	Energy	-3.7%	-4.0%	-7.3%	-7.3%	4.1%	-7.2%			
	Utilities	-3.7%	-2.8%	-3.1%	-3.1%	-0.2%	-6.0%			
	Construction	0.1%	-4.0%	-3.5%	-3.5%	-1.7%	-9.3%			
	Wholesale	18.0%	-0.3%	-3.0%	-3.0%	-0.3%	-3.6%			
	Transportation	18.0%	-0.6%	-4.5%	-4.5%	-2.1%	-7.2%			
	Accommodation	18.0%	0.7%	-2.7%	-2.7%	-0.7%	-2.7%			
	Communication	4.8%	-1.8%	-3.2%	-3.2%	-0.7%	-5.7%			
	Financial Activities	-0.1%	-1.8%	-2.0%	-2.0%	0.5%	-3.3%			
	Real Estate	1.5%	-2.0%	-1.8%	-1.8%	0.9%	-2.9%			
	Professional Activities	11.0%	-2.5%	-3.3%	-3.3%	-0.9%	-6.7%			
	Public Administration	3.2%	-1.4%	-2.4%	-2.4%	-0.1%	-3.9%			
	Entertainment	4.3%	-1.8%	-2.2%	-2.2%	0.2%	-3.9%			

MACRO-SCENARIO ANALYSIS – SPAIN (1/2)

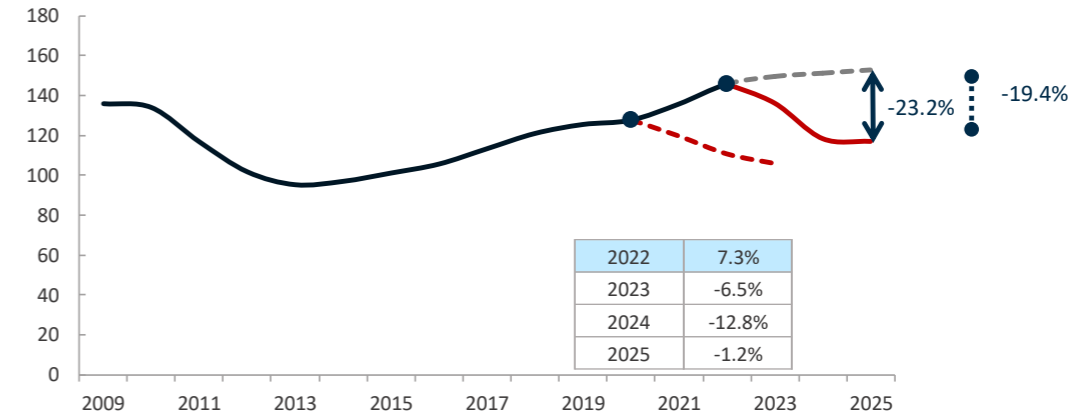


While in Spain GDP net shock is higher vs. ST'21 (-5.4% vs. -3.2%) and HPI adverse projections shows a more severe shock (-19.4% vs. -17%), unemployment rate shock is slightly lower (5.6% vs. 5.8%).

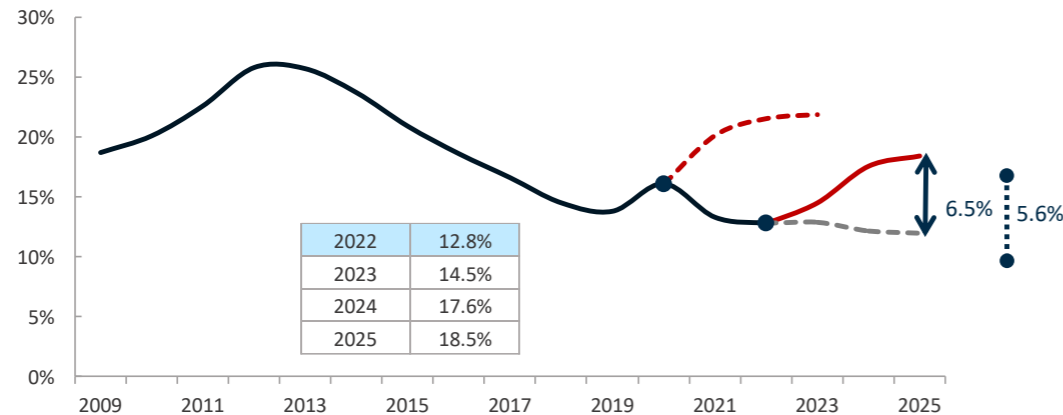
GDP Growth Spain - Net shock -5.4% (vs 2021 shock -3.2%)



House Prices Spain - Net shock -19.4% (vs 2021 shock -17%)



Unemployment Spain - Net shock 5.6% (vs 2021 shock 5.8%)



2023 Stress Test Macro Scenarios vs 2021

	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-7.4%	-14.6%	5.6%	8.1%	-19.4%	-22.0%
# St Dev.	1.69	3.46	1.26	1.97	2.74	3.05
Confidence Level	95.49%	99.97%	89.56%	97.57%	99.69%	99.89%
Baseline Drop	-10.9%	-14.5%	6.5%	7.6%	-23.2%	-21.2%
# St Dev.	2.49	3.44	1.45	1.86	3.26	2.95
Confidence Level	99.36%	99.97%	92.62%	96.86%	99.95%	99.84%

Historical Data ———— 2023 EBA Stressed Scenario ————
 EU Baseline Scenario - - - - - 2021 EBA Stressed Scenario - - - - -

MACRO-SCENARIO ANALYSIS – SPAIN (2/2)

EU

FR

DE

GR

IE

IT

NL

PT



SE

Very different shocks in Spain by sector. Manufacturing – high intensity is the sector with the highest impact (-24.1%) followed by Mining (-13.4%) and Transportation (-11.6%), while entertainment is the only one with a positive shock a cumulative growth of 5.9%.

2023 Stress Test Macro Scenarios - GVA Growth									
		Actual	Adverse						
		2022	2023	2024	2025	Net Shock (3years)			
	Agriculture	-1.2%	-4.3%	-3.0%	0.1%	-7.2%			
	Mining	0.1%	-5.2%	-6.7%	-1.5%	-13.4%			
	Manufacturing-High Intensity	4.1%	-6.4%	-12.4%	-5.3%	-24.1%			
	Manufacturing-Low Intensity	3.0%	-1.0%	-4.7%	-1.2%	-6.9%			
	Energy	0.1%	-6.7%	-4.2%	3.0%	-7.9%			
	Utilities	0.1%	-3.0%	-3.4%	0.0%	-6.3%			
	Construction	3.8%	-2.3%	-3.6%	-0.6%	-6.5%			
	Wholesale	15.9%	-1.4%	-1.7%	0.8%	-2.3%			
	Transportation	15.9%	-2.0%	-7.1%	-2.6%	-11.6%			
	Accommodation	15.9%	0.4%	-2.0%	0.3%	-1.2%			
	Communication	8.0%	-1.3%	-2.3%	0.4%	-3.1%			
	Financial Activities	-5.8%	-2.8%	-1.7%	0.4%	-4.1%			
	Real Estate	-0.6%	-4.2%	0.0%	1.6%	-2.5%			
	Professional Activities	6.8%	-1.6%	-1.8%	0.7%	-2.7%			
	Public Administration	-4.3%	-3.6%	-1.5%	0.4%	-4.6%			
	Entertainment	16.3%	5.7%	-0.8%	1.1%	5.9%			

MACRO-SCENARIO ANALYSIS – SWEDEN (1/2)

EU

FR

DE

GR

IE

IT

NL

PT

ES

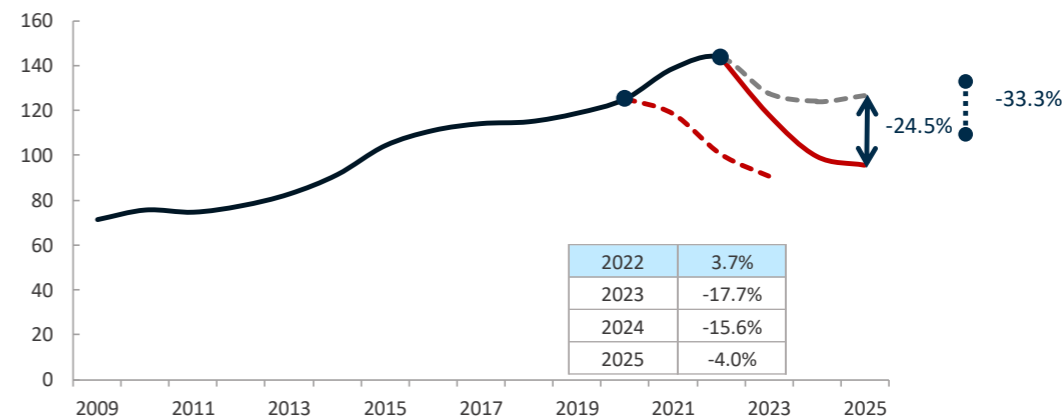


GDP net shock is higher than the ST'21 (-7.8% vs. -4.4%), unemployment rate shock is slightly lower (5.9% vs. 6.1%) and HPI shows a more severe shock (-33.3% vs. -27.6%). Sweden is one of the countries with the highest GDP and HPI net shock in comparison to the EU average.

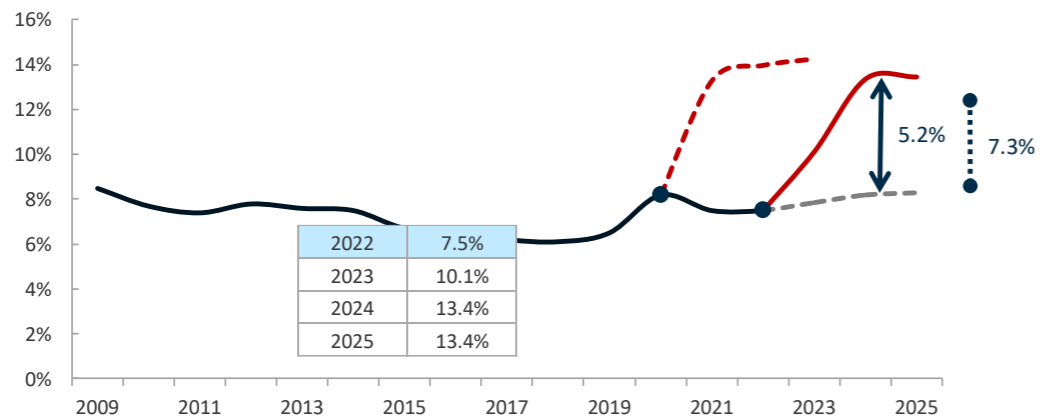
GDP Growth Sweden - Net shock -7.8% (vs 2021 shock -4.4%)



House Prices Sweden - Net shock -33.3% (vs 2021 shock -27.6%)



Unemployment Sweden - Net shock 5.9% (vs 2021 shock 6.1%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-8.5%	-6.8%	7.3%	8.2%	-33.3%	-27.6%
# St Dev.	3.09	2.41	10.00	10.32	7.82	6.41
Confidence Level	99.90%	99.20%	100.00%	100.00%	100.00%	100.00%
Baseline Drop	-9.8%	-13.0%	5.2%	6.7%	-24.5%	-34.8%
# St Dev.	3.57	4.63	7.03	8.46	5.74	8.08
Confidence Level	99.98%	100.00%	100.00%	100.00%	100.00%	100.00%

Historical Data

EU Baseline Scenario



2023 EBA Stressed Scenario

2021 EBA Stressed Scenario



MACRO-SCENARIO ANALYSIS – SWEDEN (2/2)

EU

FR

DE

GR

IE

IT

NL

PT

ES



All sectors present a negative net shock, the highest impact is presented during the first two years with a slow recovery at the end of the exercise. Mining is the sector with the highest impact (-13.7%).

2023 Stress Test Macro Scenarios - GVA Growth									
		Actual		Adverse					
		2022	2023	2023	2024	2025	Net Shock (3years)		
	Agriculture	-3.3%	-5.0%	-3.4%	0.1%	-8.2%			
	Mining	1.1%	-5.1%	-6.3%	-2.3%	-13.7%			
	Manufacturing-High Intensity	6.3%	-4.8%	-7.1%	-0.7%	-12.5%			
	Manufacturing-Low Intensity	0.6%	-1.5%	-7.2%	-2.8%	-11.6%			
	Energy	1.1%	-6.9%	-7.0%	1.3%	-12.6%			
	Utilities	1.1%	-3.6%	-3.2%	0.4%	-6.4%			
	Construction	4.7%	-4.3%	-3.2%	0.8%	-6.8%			
	Wholesale	3.9%	-6.3%	-4.0%	0.7%	-9.7%			
	Transportation	3.9%	-4.1%	-5.2%	-0.1%	-9.5%			
	Accommodation	3.9%	2.8%	-6.6%	-3.3%	-7.0%			
	Communication	5.5%	-4.6%	-4.4%	-0.3%	-9.4%			
	Financial Activities	0.8%	-5.7%	-3.2%	0.6%	-8.2%			
	Real Estate	1.5%	-4.3%	-2.8%	-0.1%	-7.2%			
	Professional Activities	9.4%	-5.0%	-4.0%	0.6%	-8.4%			
	Public Administration	-0.8%	-4.4%	0.1%	3.0%	-1.4%			
	Entertainment	6.8%	-1.5%	-1.6%	1.4%	-1.6%			

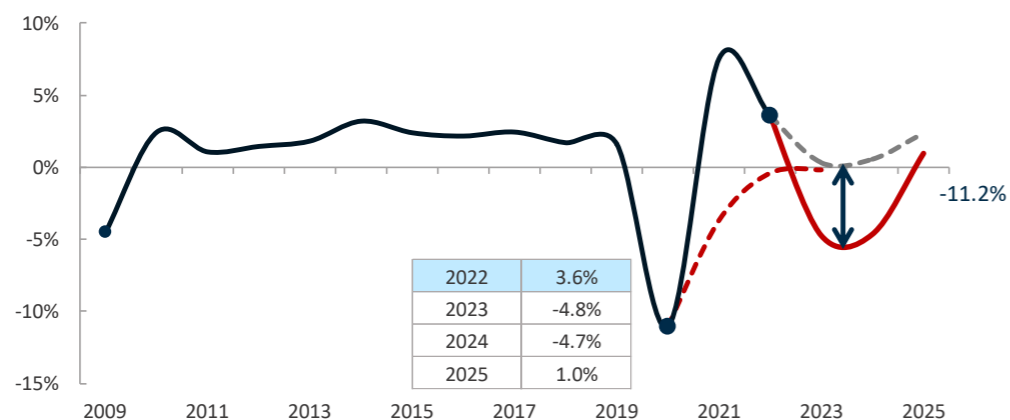
MACRO-SCENARIO ANALYSIS – UNITED KINGDOM



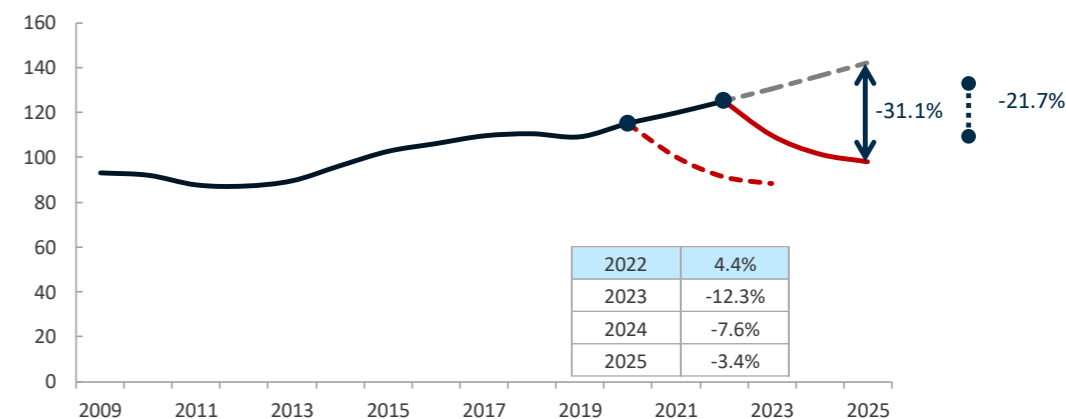
UNITED STATES

GDP and HPI in UK show a more severe shock compared to EU average and presents a more severe GDP and Unemployment shock vs ST'21 (-8.3% vs. 4.1%, and 6.8% vs. 4.4%). Meanwhile, HPI shock is slightly lower vs. ST'21 (21.7% vs. 23.3%).

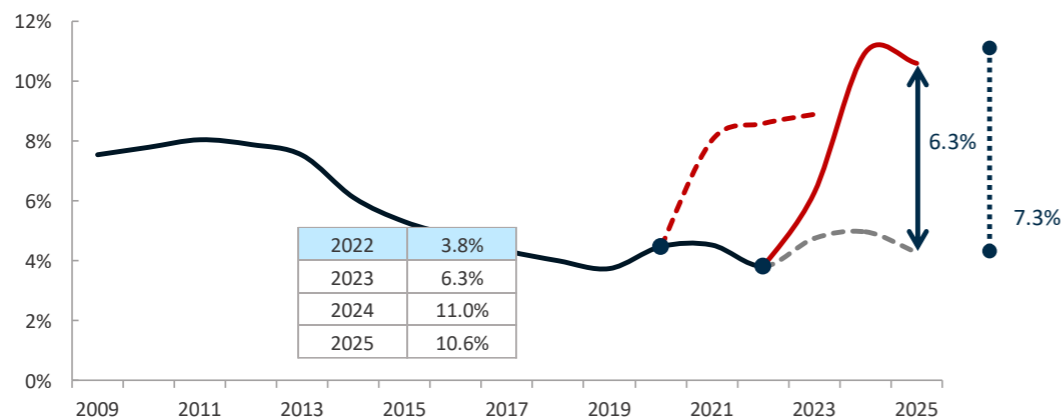
GDP Growth United Kingdom - Net shock -8.3% (vs 2021 shock -4.1%)



House Prices United Kingdom - Net shock -21.7% (vs 2021 shock -23.3%)



Unemployment United Kingdom - Net shock 6.8% (vs 2021 shock 4.4%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-10.0%	-14.7%	7.3%	5.1%	-21.7%	-23.3%
# St Dev.	2.34	3.59	4.27	3.03	6.17	6.21
Confidence Level	99.03%	99.98%	100.00%	99.88%	100.00%	100.00%
Baseline Drop	-11.2%	-13.9%	6.3%	3.7%	-31.1%	-29.6%
# St Dev.	2.62	3.39	3.74	2.19	8.84	7.90
Confidence Level	99.55%	99.96%	99.99%	98.58%	100.00%	100.00%

Historical Data
EU Baseline Scenario



2023 EBA Stressed Scenario
2021 EBA Stressed Scenario



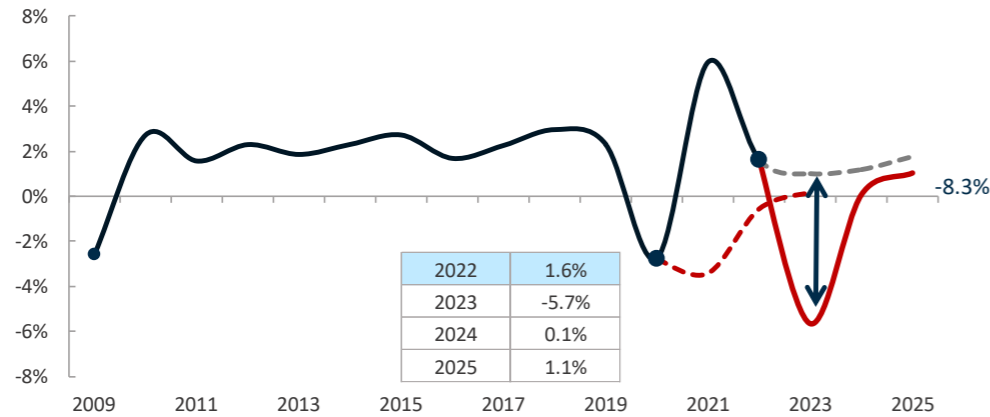
MACRO-SCENARIO ANALYSIS – UNITED STATES

UNITED KINGDOM

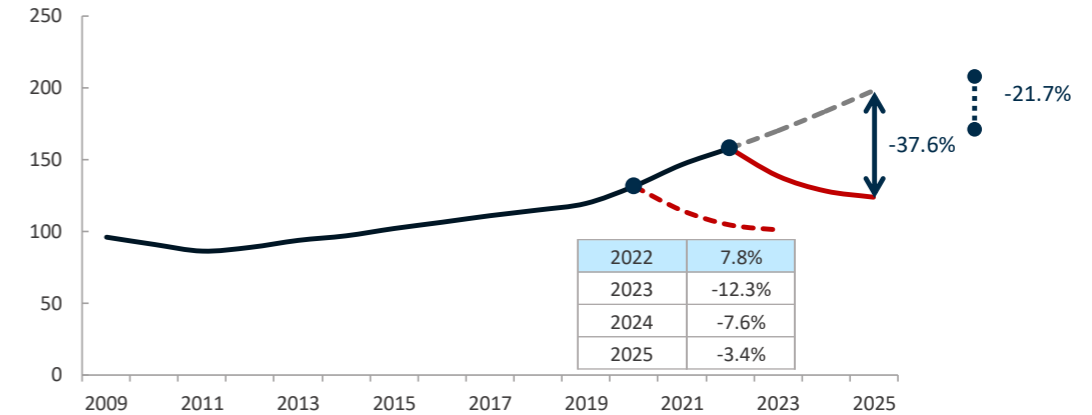


Like the UK, GDP and HPI for US show a more severe shock compared to the EU average. US presents a more severe GDP and Unemployment shock compared to previous exercise (-4.6% vs. 3.7%, and 3% vs. 1.8% respectively), while HPI shock is slightly lower (21.7% vs. 23.3%).

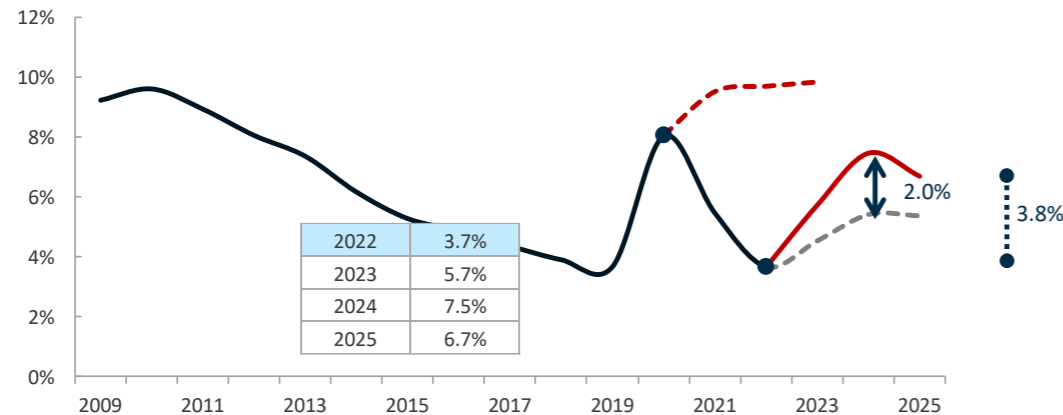
GDP Growth United States - Net shock -4.6% (vs 2021 shock -3.7%)



House Prices United States - Net shock -21.7% (vs 2021 shock -23.3%)



Unemployment United States - Net shock 3% (vs 2021 shock 1.8%)



	2023 Stress Test Macro Scenarios vs 2021					
	GDP		Unemployment		House Price Index	
	ST 2023	ST 2021	ST 2023	ST 2021	ST 2023	ST 2021
Peak-to-trough	-5.7%	-6.6%	3.8%	6.2%	-21.7%	-23.3%
# St Dev.	2.61	3.34	1.75	2.83	4.50	5.24
Confidence Level	99.55%	99.96%	95.97%	99.76%	100.00%	100.00%
Baseline Drop	-8.3%	-11.3%	2.0%	4.8%	-37.6%	-34.8%
# St Dev.	3.81	5.74	0.94	2.18	7.78	7.83
Confidence Level	99.99%	100.00%	82.66%	98.53%	100.00%	100.00%

Historical Data
EU Baseline Scenario



2023 EBA Stressed Scenario
2021 EBA Stressed Scenario



TRADING MARKET RISK ANALYSIS – INTEREST RATES

EBA ST 2023
EBA ST 2021

INTEREST RATES

SOVEREIGN SHOCKS

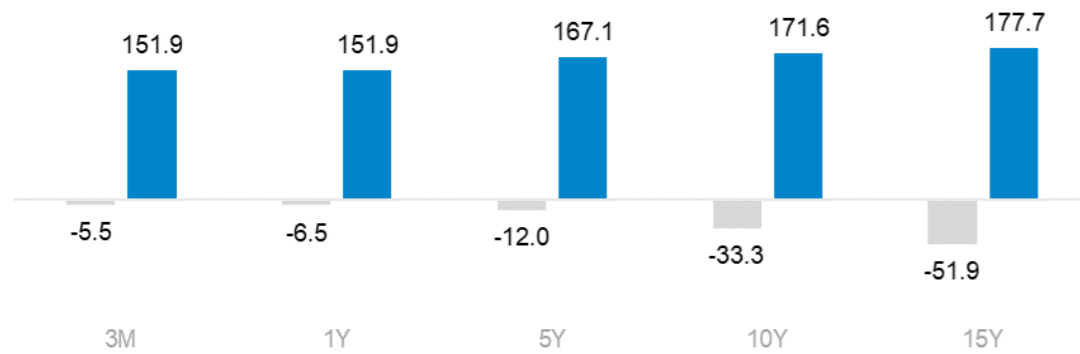
FX TRADING SHOCKS

EQUITY SHOCKS

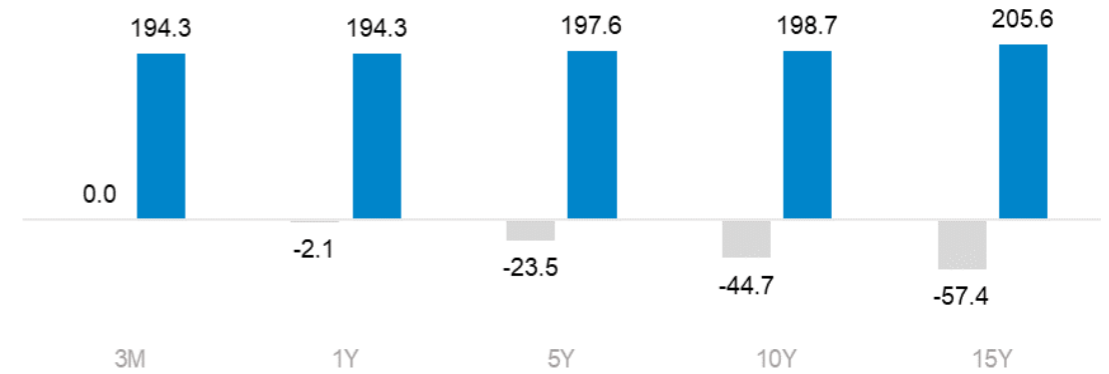
CREDIT SPREADS

Positive and very high interest rate scenarios across term yields and markets. Yield shocks higher than 150bp for all markets, reaching 205bp the 15y yield in UK.

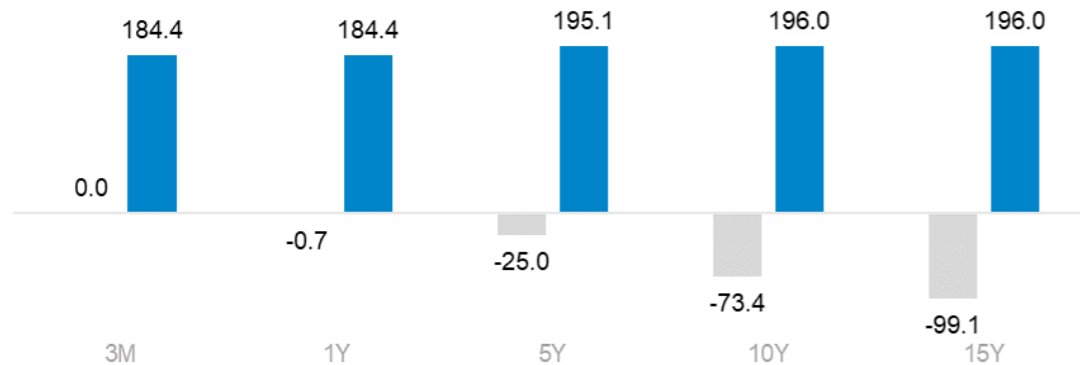
EUR IR yield shock - Euro Area



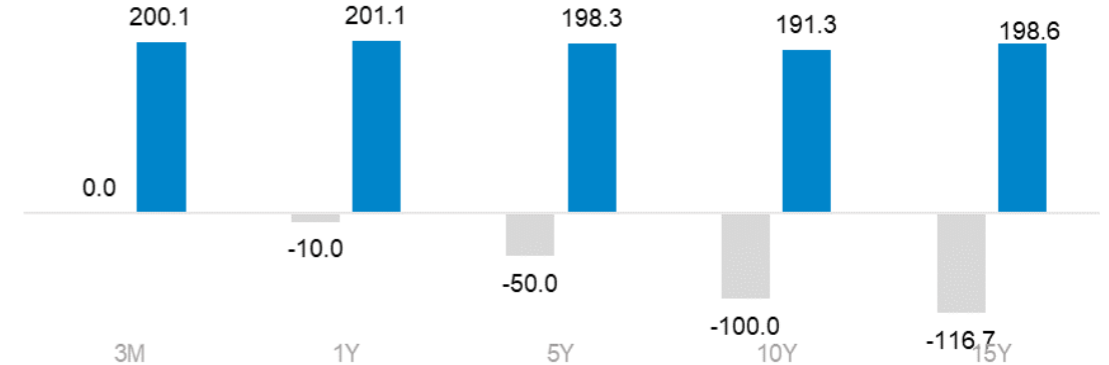
EUR IR yield shock - United Kingdom



EUR IR yield shock - United States



EUR IR yield shock - Mexico



TRADING MARKET RISK ANALYSIS – SOVEREIGN

EBA ST 2023
EBA ST 2021

INTEREST RATES

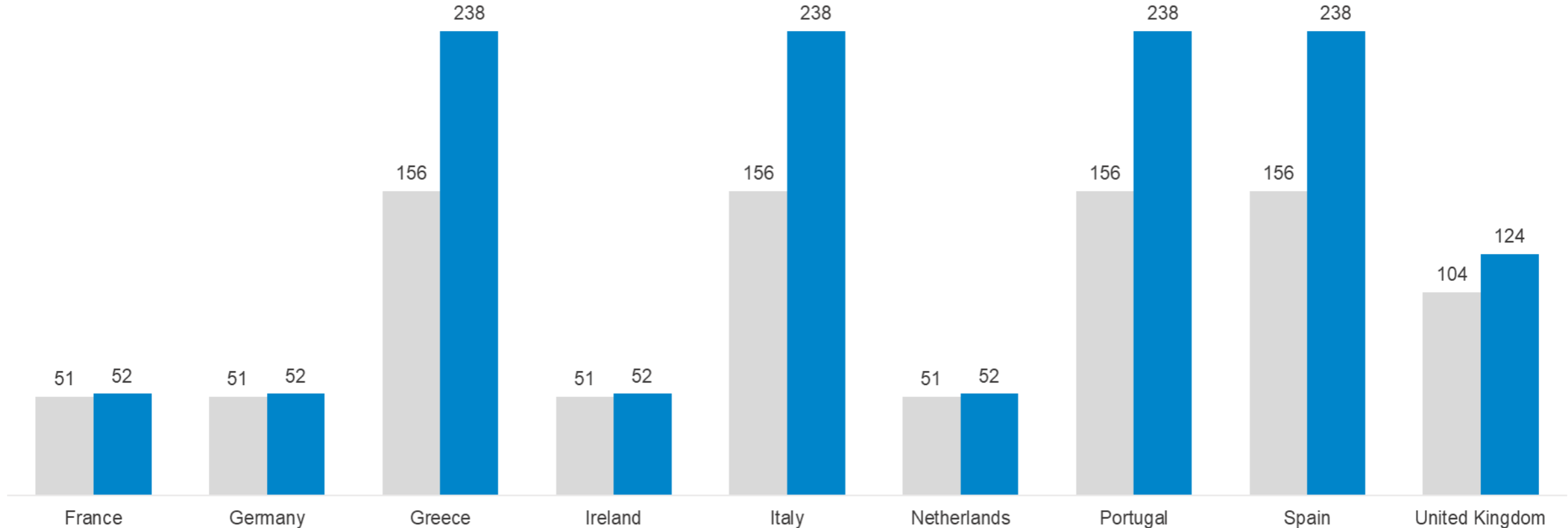
SOVEREIGN SHOCKS

FX TRADING SHOCKS

EQUITY SHOCKS

CREDIT SPREADS

Proposed sovereign debt shocks are much higher in all southern European countries compared to those in ST'21 (238 vs. 156) and UK (124 vs.104). Almost same shocks for rest of EU countries.



TRADING MARKET RISK ANALYSIS – FX SHOCKS

EBA ST 2023
EBA ST 2021

INTEREST RATES

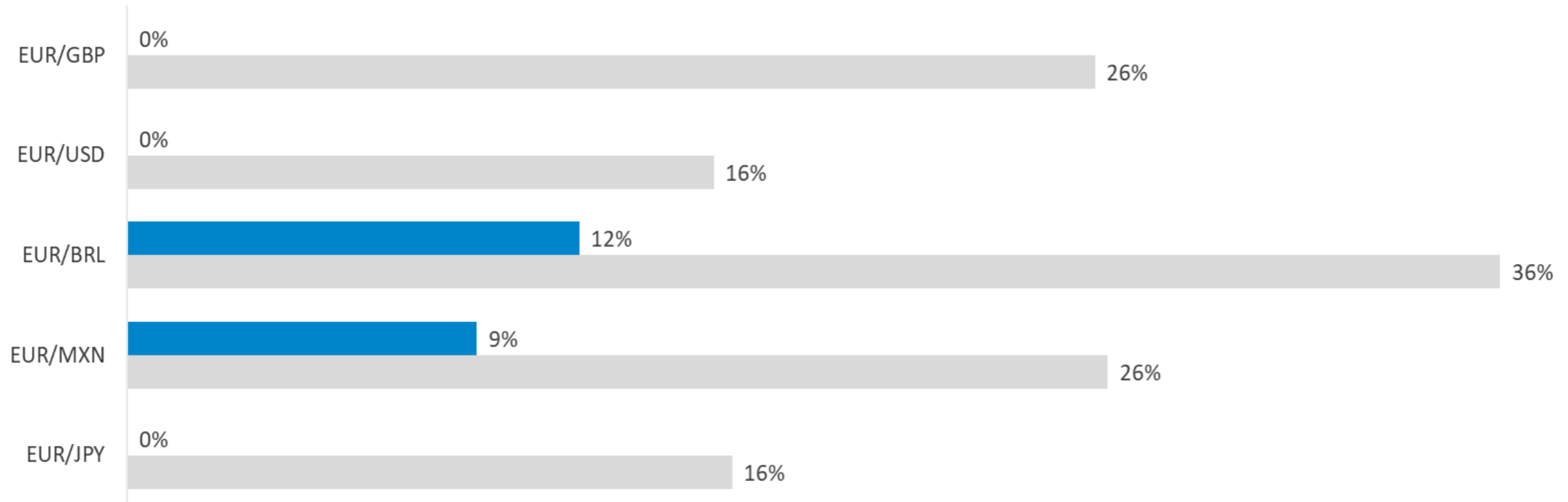
SOVEREIGN SHOCKS

FX TRADING SHOCKS

EQUITY SHOCKS

CREDIT SPREADS

No FX impact either in baseline or adverse for UK, US or Japan. Much lower depreciation compared to ST'21 in emerging counties such as Brazil (12% vs. 36% depreciation) and Mexico (9% vs. 26%).



TRADING MARKET RISK ANALYSIS – EQUITY SHOCKS

EBA ST 2023
EBA ST 2021

INTEREST RATES

SOVEREIGN SHOCKS

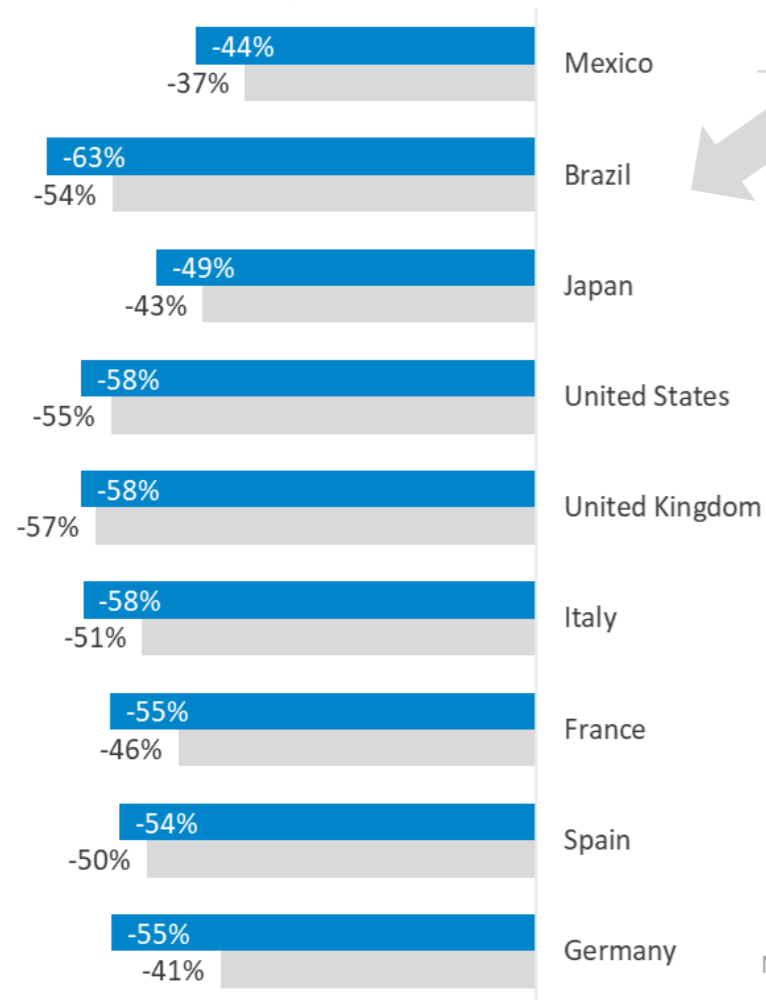
FX TRADING SHOCKS

EQUITY SHOCKS

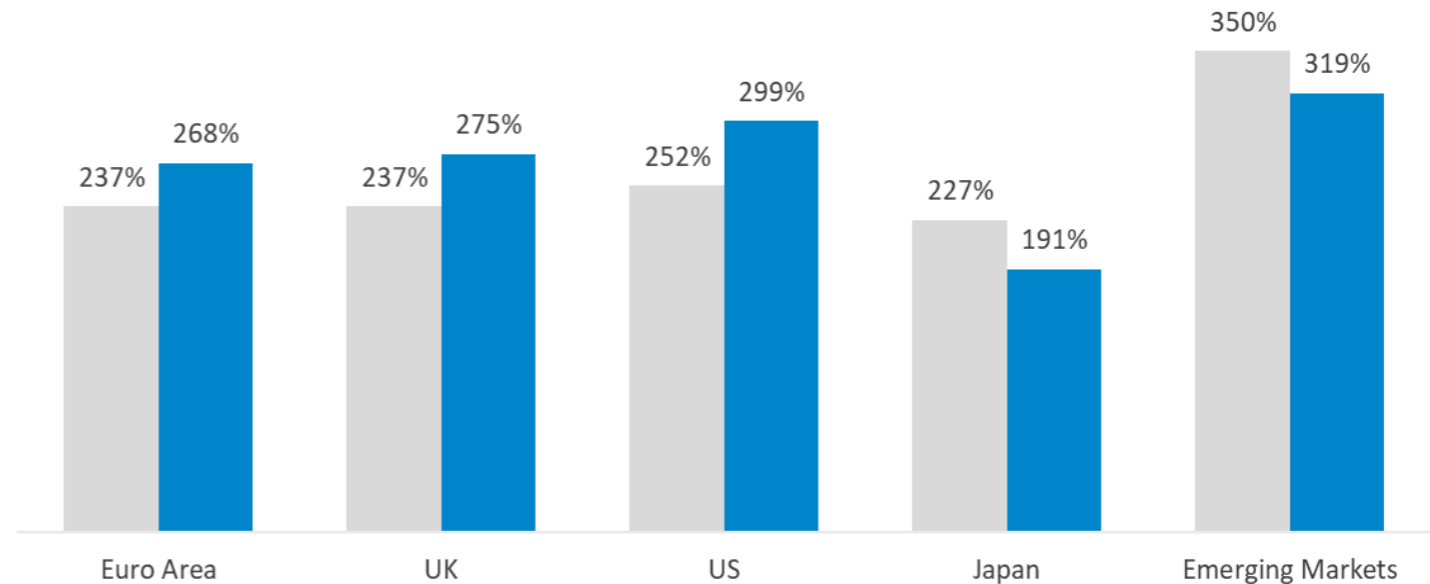
CREDIT SPREADS

2023 Adverse Scenario presents more severe equity index and volatility shocks in comparison to EBA 2021 ST, consistent across all countries except for equity volatility shocks in Japan and Emerging Countries.

Equity Index Shocks



Equity Volatility Shocks



Note: For Equity Index Shocks, Mexico and Brazil 2016 Other EM Equity used as comparison. For Equity Volatility Shocks, Emerging Markets 2016 showing "Others"

TRADING MARKET RISK ANALYSIS – CREDIT SPREADS

EBA ST 2023
EBA ST 2021

INTEREST RATES

SOVEREIGN SHOCKS

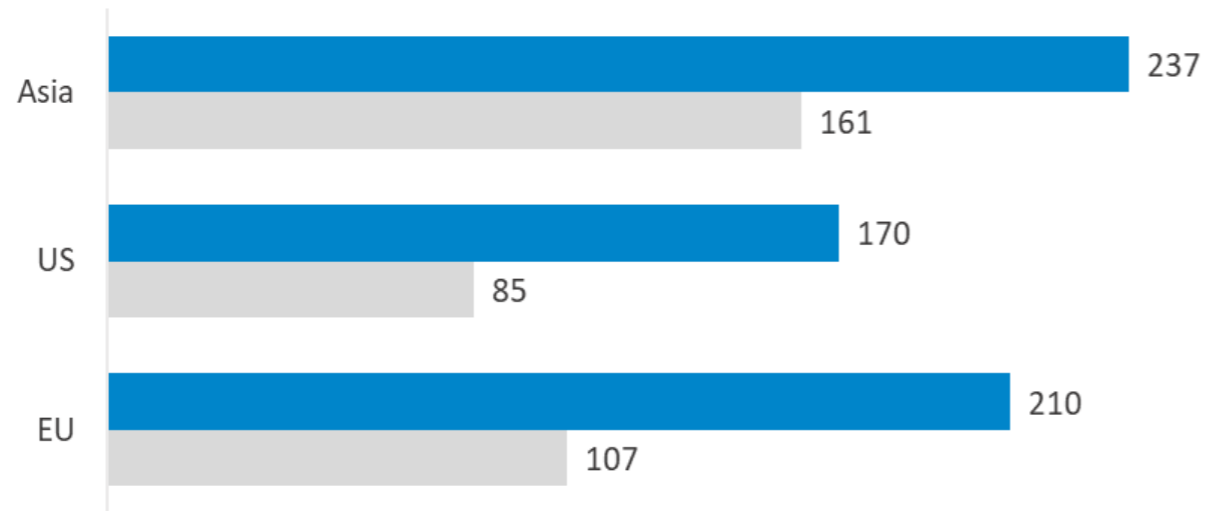
FX TRADING SHOCKS

EQUITY SHOCKS

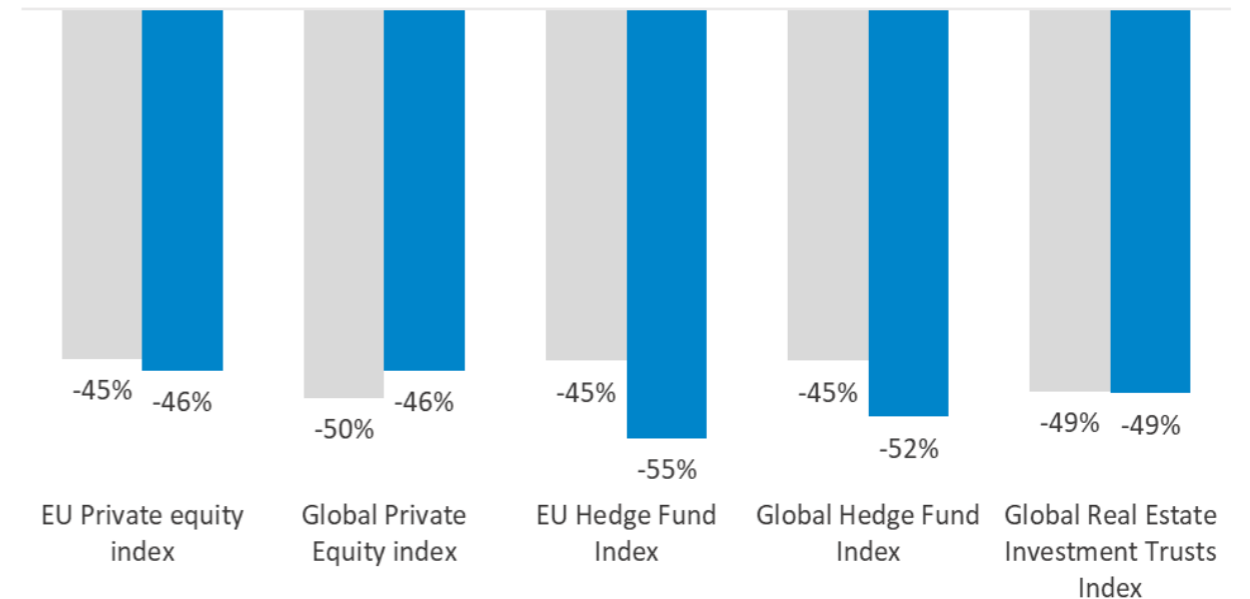
CREDIT SPREADS

Credit spread and Hedge and Real Estate funds show higher shocks across all analyzed regions in 2023 than in previous exercise, except for Global Private Equity Index and Global RE Investment Trusts Index.


Credit Spreads



Funds



Note: For Funds, Global Hedge Fund Index 2016 showing "Hedge Funds" and Global Real Estate Index 2016 showing Real Estate Funds EU

Alvarez & Marsal Holdings, LLC. All rights reserved. ALVAREZ & MARSAL®,
 ® and A&M® are trademarks of Alvarez & Marsal Holdings, LLC.

© Copyright 2023

0000

