



# Climate-related scenarios for the one-off Fit-for-55 scenario analysis exercise

## Introduction

The European Green Deal aims to make the EU climate-neutral by 2050. Therefore, the European Commission has adopted a set of proposals to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas (GHG) emissions by at least 55% by 2030 compared with 1990 levels (henceforth the Fit-for-55 package).

The financial sector has a major role to play in financing this transition to a climate-neutral continent. To achieve this objective, the financial sector needs to be resilient in the face of climate-related and adverse macro-financial shocks. Therefore, scenario analysis can help policymakers anticipate how such shocks to the financial system could jeopardise the EU's ability to achieve its climate goals and hence enable them to react in a timely manner in order to strengthen resilience.

The European Commission has invited the European Supervisory Authorities (ESAs), the European Central Bank (ECB) and the European Systemic Risk Board (ESRB) to cooperate in a one-off scenario analysis exercise.<sup>1</sup> The aim of this exercise is to assess the resilience of the EU financial system during the implementation of the Fit-for-55 package and to gain insights into the capacity of the financial system to support the transition to a lower carbon economy, even under conditions of stress. In line with common EU-wide stress test exercises conducted by the ESAs, the ESRB – with technical support from the ECB – provides the adverse scenarios for this exercise.<sup>2</sup>

This document sets out three scenarios for the purpose of this one-off exercise: one baseline scenario and two adverse scenarios. In the baseline scenario, the economy and financial system develop according to macroeconomic and financial conditions that facilitate an orderly green transition in line with the Fit-for-55 package. The two adverse scenarios set out paths for key economic and financial variables in hypothetical adverse situations that are triggered by the materialisation of climate-related and/or macro-financial risks. All the scenarios reflect the European Commission's request that the climate objectives of the Fit-for-55 package are achieved by 2030. The stress test horizon for the macroeconomic variables (i.e. GDP, inflation and real estate prices) is between 2023 and 2030, while the shock profiles of the financial variables (i.e. equity prices, corporate bonds, sovereign bonds, swap rates and residential mortgage-backed securities) are one-off instantaneous shifts relative to their end-2022 levels

<sup>1</sup> See [Request by the European Commission for a one-off scenario analysis exercise to be conducted jointly by the European Supervisory Authorities, the ECB and the ESRB](#), 8 March 2023.

<sup>2</sup> See [Letter from Mme Lagarde \(President of the ECB and Chair of the ESRB\) to Ms Mairead McGuinness \(European Commissioner\) on the "Assessment of the financial system's resilience to stress in the transition to the EU's 2030 goals for the reduction of greenhouse gas emissions"](#), 28 March 2023.

over the first year of the horizon.<sup>3</sup> In both adverse scenarios, no monetary or fiscal policy actions are assumed beyond what is implicitly captured in historical asset price movements over time. The scenarios should not be considered a forecast of the most likely negative shocks to the financial system.

## Systemic and climate-related risks addressed by the Fit-for-55 scenarios

The ESRB's assessment of sources of systemic risk to the EU financial system considers climate-related risks as a financial stability issue. The impact on financial stability can arise from the large and potentially systemic losses of financial institutions from direct and indirect exposures to physical and transition risks related to global warming and other environmental risks, including abrupt asset price corrections of "stranded assets", and higher losses from natural disasters.

The scenarios in this document are constructed from the Network for Greening the Financial System (NGFS).<sup>4</sup> Specifically, the NGFS reference scenario used is the "Nationally Determined Contributions (NDC)" of Phase IV, which assumes the full implementation of all the pledged targets, even if not yet backed up by implemented effective policies, including the Fit-for-55 package. The NDC scenario is characterised by slow technological change and low-medium use of carbon dioxide removal technology, limiting warming to 2.2°C by the end of the century.

**Figure 1: NGFS NDC scenario features**

Category	Scenario	End of century (peak) warming	Policy reaction	Technology change	Carbon dioxide removal -	Regional policy variation +
Hot house world	Nationally Determined Contributions (NDCs)	2.2°C (2.6°C)	NDCs	Slow change	Low-medium use	Medium variation

Source: NGFS phase IV documentation.

Note: "Hot house world" refers to a scenario where some climate policies are implemented, but these efforts are insufficient in preventing significant global warming.

<sup>3</sup> Shocks to macroeconomic variables are on a yearly basis in line with the EBA stress test scenarios. The market shocks are one-time instantaneous shocks but generated based on the paths of the macroeconomic and climate variables.

<sup>4</sup> Based on the **NGFS Phase IV climate scenarios**. To determine the most suitable NGFS scenarios for the baseline and adverse scenarios, the year-on-year percentage change in emissions relative to 1990 from each NGFS scenario is compared with the emissions reduction target of the Fit-for-55 package. By compressing and/or frontloading the NGFS scenarios, it is possible to build several scenarios where an emissions reduction of 55% with respect to 1990 could be reached. Nevertheless, for the choice of the scenario in this exercise, it was crucial to take into consideration how other macroeconomic and energy-related variables behave according to the scenarios and years chosen between baseline and adverse (e.g. how energy prices and GDP develop in the baseline compared with the adverse scenarios).

## Narratives

### Fit-for-55 baseline scenario

The baseline scenario reflects a smooth, timely and widely anticipated green transition, in which governments implement the policy measures in the Fit-for-55 package as anticipated. This achieves large reductions in fossil fuel-related emissions, in line with the EU 2030 targets and the goals of the Paris Agreement. Technological advances help to release initial supply-side constraints by enabling a rapid shift towards more sustainable and energy-efficient production processes. At the same time, behavioural changes lead to lower energy consumption and capital flows and lending patterns adjust accordingly to support the financing of green energy investments.<sup>5</sup> These developments happen within the economic environment of the baseline scenario for the EU-wide EBA stress test 2023 exercise (2023-2025) followed by the NGFS scenario (2026 onwards).

### First Fit-for-55 adverse scenario

The first adverse scenario incorporates a sudden negative reassessment of transition risks by market participants and features a generalised confidence shock. The shock reflects a sudden downward change in the perception of climate-related risks, and it is not attributed to the implementation of the Fit-for-55 package. The first adverse scenario is the shock to the baseline scenario from asset price falls, which are triggered by a sell-off of assets labelled as brown; henceforth “run-on-brown”.<sup>6</sup> The shock, representing a flight-to-quality from brown to non-brown assets, materialises in the form of higher financing costs and lower access to funding for brown firms.

### Second Fit-for-55 adverse scenario

The objective of the second adverse scenario, in line with the European Commission’s request, is to explore the extent to which the impact of the climate-related shocks considered in the first adverse scenario are exacerbated and whether the financial system is able to support the transition in the context of a deteriorated macroeconomic and financial outlook, such as that of the 2023 EBA adverse scenario. The selection of stress factors not related to climate represents a subset of the main financial stability risks to which the EU financial system is exposed. This is in line with the scenario for the EU-wide EBA stress test 2023 exercise and reflects the risk assessments of the ESRB and the ECB. The stress factors include a partial deglobalisation triggered by the Russian invasion of Ukraine and increased geopolitical risks leading to an increase in production costs and prices, as well as the consequent decline in private consumption and private investment. The latter, combined with an increased perception of climate-related risks via the run-on-brown shock, requires major government interventions to foster the green transition. This reaction leads to a surge in public sector borrowing, raising concerns about debt sustainability.

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<sup>5</sup> All assumptions about technological progress, energy-related developments and behavioural changes in all Fit-for-55 scenarios follow the assumptions made within the NGFS scenarios and methodology.

<sup>6</sup> See Annex for more information on the definition and modelling of “run-on-brown”.

## Annex

### Data description

### Data sources

The data used in this exercise come from the corporate credit risk model of the ECB top-down economy-wide climate stress test.<sup>7</sup> The data sample covers firm-level data on euro area non-financial corporations (NFCs) with large coverage in terms of lending activity (around 80% of the total loans to euro area NFCs based on AnaCredit exposures). The data include several components that are fundamental for the calibration.

- Data on euro area firms' balance sheet items come from Orbis.
- Data on absolute and relative Scope 1 and 2 emissions of all firms in the sample come from Urgentem. This database includes reported emissions for around 5,000 companies and has a methodology to estimate the emissions for the rest of the firms in the sample of this exercise.<sup>8</sup>
- Data on energy balances<sup>9</sup> at country-sector level come from Eurostat. From these aggregated energy balances, a methodology to downscale the energy mix of each firm was developed based on conversion factors and firms' data on emissions (more detailed information can be found in the section "Methodology for energy mix and energy emissions").<sup>10</sup>
- Data on electricity and gas prices at country-consumption band level come from Eurostat. Based on the downscaling methodology for firms' energy consumption by source (see Figure 2), a consumption band is assigned to each firm based on its absolute consumption levels (for both electricity and gas prices) and the corresponding electricity and gas prices as of 2022. The prices at country-consumption level are subsequently projected forward using the scenario methodology (i.e. projecting them according to the NGFS NDC scenario paths for energy consumption and prices) under the assumption that prices for each consumption band move in the same way within a given country. Firms are allowed to change consumption band across time, and this is modelled based on the projected energy mix and consumption levels.

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<sup>7</sup> See [ECB economy-wide climate stress test \(2023\)](#).

<sup>8</sup> See Annex A of [ECB economy-wide climate stress test \(2021\)](#) for more information on the data.

<sup>9</sup> The definition and methodology of the energy balance can be found in [Eurostat](#).

<sup>10</sup> The conversion factors for stationary combustion in the energy industry reflect the full carbon content of the fuel concerned. They are sourced from the [IPCC 2006 Guidelines for National Greenhouse Gas Inventories](#) like the conversion factors for other industries. See Chapter 3 and Annex 1 of "[The Road to Paris: stress testing the transition towards a net-zero economy](#)", Occasional Paper Series, No 328, ECB, Frankfurt am Main, 2023, for more information.

## Data coverage

### 1) Orbis

The Orbis dataset provides information about firm-level balance sheet data, such as total assets, current assets, cash and cash equivalents, tangible fixed assets, physical assets, and liabilities, revenues, operating expenses and operating earnings before interest and taxes (EBIT) for 21 sectors and for each country within the euro area, covering around 2,707,150 firms.

### 2) Urgentem

Urgentem provides data on absolute and relative Scope 1, 2 and 3 emissions, including average emission intensities inferred by sector. Regarding emission data (specifically, emission intensity per country-sector level), all sectors are evenly represented across the euro area countries except for NACE code O, which is represented in 14 countries, and NACE code T, which is represented in five euro area countries. The country with the highest representation is France, accounting for almost 30% of the total country-sector values, followed by Italy (23%) and Spain (15%).

### 3) AnaCredit

By merging the data from AnaCredit, Orbis and Urgentem, around 2,926,355 firms in the euro area are covered. This new dataset offers comprehensive accounting data including revenue, operating expenses, operating EBIT, total assets, current assets, cash and cash equivalent, physical assets, liabilities and current liabilities. For missing balance sheet positions of firms, an inference procedure approximates them (Table 1). France is the most represented country (contributing 30% of the financial data), followed by Italy, Spain and Germany.

### 4) iBACH

iBACH provides information on firm's demographic data and economic financial ratios (financial structure ratios, financial and debt service ratios, profitability ratios), as well as firm-level income statement and balance sheet data. Data from iBACH come from a database of aggregated and harmonised accounting data of NFCs maintained by the European Committee of the Central Balance Sheet Data Offices. The existing coverage includes seven countries: Belgium, Spain, France, Italy, Austria, Portugal and Slovakia. Various aggregations are performed to derive metrics such as revenue, operating expenses and total assets for comparison with the corresponding variables in Orbis.

### 5) Pre-processing AnaCredit-Orbis

Debtors' information from AnaCredit is matched with data from Orbis and iBACH to create a comprehensive firm-level dataset that includes: geolocational information, NACE sector classifications, supervisory data and financial data. All the data sources are pooled to achieve the highest level of coverage in terms of number of firms and completeness of information. For financial data, priority is given according to the following ranking: Orbis, iBACH, AnaCredit/RIAD (whenever data are simultaneously available from multiple sources).

For the projections of the Fit-for-55 scenarios, the data are cross-sectional and refer to the year 2020 (latest date available in Orbis at the time of the calibration). When financial information was not available in 2020, the most up to date data of the previous three years were used to increase the coverage (where available). Moreover, in cases where a firm reported negative data for the variables of inventories, cash and cash equivalents, or current assets, the values were converted to missing values. Similarly, if revenues were less than €1,000, the value was transformed into a missing value. Several cleaning procedures were implemented to fill the missing values (see Table 1).

**Table 1: Techniques to fill negative or missing values for variables**

Variable	Definitions	Inference procedure
Other operating expenses	All costs not directly related to the production of goods sold (commercial costs, administrative expenses, depreciation of those costs, etc.)	Revenue – Cost of goods sold – Operating EBIT
Cost of goods sold	Costs directly related to the production of the goods sold + depreciation of those costs	Revenue – Other operating expenses – Operating EBIT
Tangible fixed assets	All tangible assets such as buildings, machinery, etc.	Fixed assets <sup>11</sup> – Intangible fixed assets <sup>12</sup> – Other fixed assets <sup>13</sup>
Non-current liabilities	Pension, personnel costs, taxes, intragroup debts, accounts received in advance, etc.	Total Shareholder Funds & Liabilities – Current liabilities – Shareholder fund <sup>14</sup>
Current liabilities	Current liabilities of the company (Loans + Creditors + other current liabilities)	Total share funds liabilities – Non-current liabilities <sup>15</sup> – Shareholders' funds
Total shareholder funds & liabilities	Shareholders' funds + non-current liabilities + current liabilities	Total Assets
Operating EBIT	EBIT or all operating revenues – operating expenses	Revenue – Operating expenses

The following variables are calculated by aggregating other balance sheet items:

<sup>11</sup> Fixed assets is the total amount, after depreciation, of non-current assets (intangible assets, tangible assets and other fixed assets).

<sup>12</sup> Intangible fixed assets encompass training expenses, research expenses, goodwill, development expenses and all other expenses with a long-term effect.

<sup>13</sup> Other fixed assets represent all others fixed assets such as long-term investments, shares, participations and pension funds.

<sup>14</sup> Shareholder fund is the total equity (capital + other shareholders funds).

<sup>15</sup> Non-current liabilities represent the long-term liabilities of the company (long-term financial debts and other long-term liabilities and provisions).

- Physical assets = tangible fixed assets + inventories
- Liabilities = Current liabilities + non-current liabilities
- Operating expenses = Cost of goods sold + Other operating expenses

As a final cleaning step and to eliminate potential outliers generated during the previous steps, observations were dropped where the following financial ratios were below the 0.1 percentile or above the 99.9 percentile:

- Revenues / Total Assets
- Operating Expenses / Total Assets
- Revenues / Operating Expenses
- EBIT / Total Assets

### **Methodology for energy mix and energy emissions**

Projections for Scope 1 and 2 GHG emissions and energy consumption levels by energy source at the firm level are generated by combining information on firms' Scope 1 and 2 GHG emissions from Urgentem, energy mix at country-sector level from Eurostat at the starting point, and the NGFS scenarios. Firm-level data on GHG emissions and energy consumption are needed for running the ECB top-down climate stress test models that generate probabilities of default which are then used to generate corporate bond spreads for the Fit-for-55 scenarios.<sup>16</sup>

NGFS emission paths are available at regional level but were downscaled at country-sector level based on the methodology used in the ECB's second economy-wide climate stress test. In a first step, GHG emissions paths were downscaled at country level using NGFS country-specific GDP paths. The resulting country-level emissions were then allocated to economic sectors in proportion to their respective projected brown energy consumption<sup>17</sup>, while accounting for future changes in the energy mix over time. Firm-level energy consumption is then estimated by combining firm-level emissions and country-sector energy consumption. Each step is explained below.

The following steps were implemented to obtain country-sector Scope 1 emissions paths.

1. For each scenario, firms' revenues (from Orbis and iBACH) were projected until 2030 using the corporate model, taking into account only macro-financial shocks to GDP and inflation stemming from the long-term NGFS scenarios, and not the firm-specific climate shocks. Revenue growth indices at country-sector level were derived by averaging the projected revenues of firms operating in each respective country-sector couple (at NACE level 2 granularity).

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<sup>16</sup> More information on how energy consumption and emissions are used within the ECB model can be found in the chapter "Run-on-brown", particularly in equations 5 and 6.

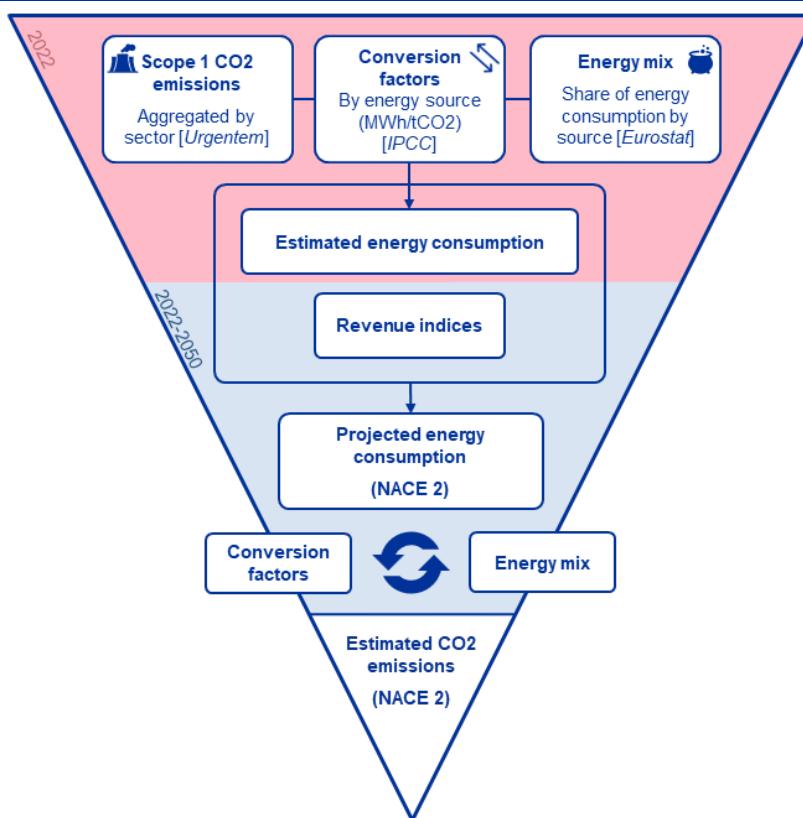
<sup>17</sup> Brown energy consumption concerns the consumption of gas, oil and coal.

2. Fossil fuel consumption for the year 2022 was estimated<sup>18</sup> based on Scope 1 GHG emissions (from Urgentem and aggregated at NACE 2 level), energy-to-emissions conversion factors and information on the country  $c$ , sector  $d$  and energy consumption by source  $k$  (which are sourced from Eurostat):

$$\text{Fossil fuels consumption}_{t_0}^{c,d} = \frac{\text{Scope 1 emissions}_{t_0}^{c,d}}{\sum_k (\text{Conversion factor}_k \cdot \text{Share}_k^{c,d})} \quad (1)$$

3. Estimated fossil fuel consumption was projected until 2050 using country-sector revenue growth indices (computed in step 1), assuming that energy needs would grow proportionally to revenues. Country-sector emissions were backward engineered from the estimated energy consumption applying conversion factors, and a forward-looking energy mix was obtained by projecting Eurostat historical data based on NGFS-implied energy consumption paths by energy source (additional details are given in the next subsection on the estimation of firm-level electricity and brown energy consumption).
4. A forward-looking (scenario-specific) share of emissions by country and by sector was calculated and used to produce the country-sector breakdown of the aggregate GHG emissions available in the NGFS scenarios.

**Figure 2: Overview of the ECB emissions downscaling methodology**



Source: ECB methodology.

<sup>18</sup> Estimation was necessary to obtain a measure of energy consumption at company level.

The projected energy mix at country-sector level was obtained by combining the latest data from Eurostat<sup>19</sup> on energy consumption at country-sector level for 11 Eurostat energy sources and the NGFS climate scenarios. The energy consumption for each source was calculated by taking the latest historical values from Eurostat and projecting them based on NGFS-implied growth rates for the energy consumption of the corresponding energy source by country. The country-sector energy mix was then calculated directly from the projected energy consumption by taking the share represented by each energy source and dividing it by the total energy consumption of that specific country-sector.

GHG emissions at firm level were estimated using granular data from Urgentem and projected using the downscaled NGFS emissions paths. The breakdown between Scope 1, 2 and 3 emissions is crucial for estimating electricity and energy consumption at firm level. Forward-looking firm-level emissions were calculated by taking the latest available data from Urgentem and projecting them based on NGFS-implied emissions growth rates obtained after the sectoral downscaling.<sup>20</sup>

The conversion factors for stationary combustion in the energy industry reflect the full carbon content of the fuel concerned. They were sourced from the IPCC 2006 Guidelines for National Greenhouse Gas Inventories<sup>21</sup>, and they measure the kilograms of carbon dioxide equivalent by terajoules of electricity produced. Conversion factors were used, in combination with firm-level emissions and data on the energy mix at country-sector level presented above, to estimate the energy and electricity consumption of each company.

Company-level consumption of polluting energy sources<sup>22</sup> was estimated at the starting point ( $t_0 = 2022$ ) and then projected forward using NGFS paths. For each company  $i$  the conversion factor associated with each brown energy source  $k$  (i.e. gas, oil, coal, biomass and waste) was weighted by the share of energy source  $k$  in country  $c$  and sector  $s$ , adjusted to account for the proportion of brown energy sources over the total (see equation 3). This adjustment was necessary to fully allocate Scope 1 emissions to the relevant polluting energy sources and convert them into the energy consumption of these sources. Scope 1 emissions were divided by the energy-to-emissions conversion factor of each source to obtain the company-level consumption of source  $k$  at starting point  $t_0$ :

$$\text{Energy consumption}_{k,t_0}^i = \frac{\text{Scope 1 emissions}_{t_0}^i \cdot \widehat{\text{Share}}_{k,t_0}^{c,d}}{\text{Conversion factor}_k} \quad (2)$$

<sup>19</sup> See the [Eurostat energy overview](#). Eurostat provides information on energy consumption for 19 “final consumer” sectors and separately for the “energy branch”, which includes all the companies involved in the process of electricity generation, including activities related to its production, transformation, and consumption by different types of economic players (industry, transport, etc.). (A complete mapping of Eurostat sectors to the NACE economic activities classification is available in the Eurostat [Energy balance guide](#), setting out the technical details of the Energy Balances dataset.)

<sup>20</sup> Example: A French company that operates in the mining sector reported emissions in its yearly sustainability report. Data from the 2022 report are collected from Urgentem. The forward-looking emissions pathway associated with France and the mining sector was mapped to the company and used to infer future emissions.

<sup>21</sup> [“2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2 – Energy”](#), Intergovernmental Panel on Climate Change.

<sup>22</sup> For this exercise, primary energy sources were considered to be brown or polluting if they were associated with GHG emissions.

where

$$\widehat{Share}_{k,t_0}^{c,d} = \frac{Share_{k,t_0}^i}{\sum_k (Share_{k,t_0}^{c,d})} \quad (3)$$

Company-level energy consumption of brown energy sources at time  $t$  was obtained by adding together the consumption of each brown energy source  $k_b$ , projected using the NGFS-implied paths for that specific energy source:

$$Brown\ energy\ consumption_t^i = \sum_{k_b,t} (Energy\ consumption_{k_b,t_0}^i \cdot NGFS\ energy\ consumption\ index_{k_b,t}^c) \quad (4)$$

In a similar way, company-level electricity consumption was estimated at the starting point ( $t_0 = 2022$ ) and then projected forward using NGFS paths. A conversion factor for electricity was calculated by applying a weighted average of the conversion factors of the brown sources used to produce it, where the weights were the share of each source in the energy mix of electricity sector  $e$  in country  $c$ :

$$Conversion\ factor_{t_0}^{c,e} = \sum_k (Conversion\ factor_k \cdot \widehat{Share}_{k,t_0}^c) \quad (5)$$

where

$$\widehat{Share}_{k,t_0}^c = \frac{Share_{k,t_0}^{c,e}}{\sum_k (Share_{k,t_0}^{c,e})} \quad (6)$$

The company-level electricity consumption at time  $t_0$  was given by:

$$Electricity\ consumption_{t_0}^i = \frac{Scope\ 2\ emissions_{t_0}^i}{Conversion\ factor_{t_0}^{c,e} \cdot \sum_k (Share_{k,t_0}^{c,e})} \quad (7)$$

where the total share of brown sources in country  $c$  and sector  $e$  was used in the denominator to account for renewables and nuclear power – which are not directly associated with Scope 2 emissions – employed for all electricity generation in country  $c$ . Finally, the electricity consumption at time  $t$  was obtained by multiplying the starting point consumption by the electricity growth index provided as part of the NGFS scenarios:

$$Electricity\ consumption_t^i = Electricity\ consumption_{t_0}^i \cdot NGFS\ electricity\ consumption\ index_t^{c,s} \quad (8)$$

## Methodology for the scenario design

### Scenario design

The design of the scenarios is in line with the approach used in the scenarios for the ECB's second economy-wide climate stress test exercise.<sup>23</sup> In particular, the macroeconomic and financial variables, starting from end-2022 observations, are projected forward following the 2023 EU-wide stress test scenarios in the short term (2023-2025), and following the NGFS scenarios in the medium term (2026-2030). Climate-related variables are calibrated based on a selected NGFS scenario for the period from 2023 to 2030, where observed values as of 2022 are projected forward with the year-on-year changes according to the same NGFS scenario that is used for the macroeconomic and financial variables. The second-round or spillover effects across the financial system are not considered in the calibration of the shocks.

#### Box 1: Update of the EU-wide EBA stress test 2023 baseline scenario

The baseline scenario of the EU-wide EBA stress test 2023 exercise was updated with new macroeconomic projections for GDP, gross value added (GVA), interest rate and inflation. The revised projections for GDP, interest rates and inflation come from the June 2023 Eurosystem staff Broad Macroeconomic Projection Exercise (BMPE) projections. The baseline scenario was updated for 2023, 2024 and 2025, while the reference index year was set to 2022. The adverse scenario of the EU-wide EBA stress test 2023 exercise was kept unchanged from 2023 to 2025, while 2022 was revised to consider the realised figures of 2022 in line with the baseline scenario.

For GDP and inflation, the June 2023 BMPE projections were directly substituted with the old inflation rates of the EBA baseline. However, the GVA projections at country-sector level were updated proportionally to the change in the GDP projections from December 2022. Hence, the difference between the December 2022 and June 2023 projections was applied to the GVA projections for all sectors in a given country. This takes into account the specific sectoral decomposition in each country.

With regard to the long-term interest rates, the projection for the euro area interest rate was updated according to the June 2023 BMPE projections. For the EU non-euro area countries, the revised projections were extracted from the macroeconomic forecasts of the corresponding national central bank.

A degree of consistency between the two types of scenarios is preserved through the following technicalities.

- The paths of the macro variables (e.g. GDP, inflation, long-term interest rates, and gas, oil and electricity prices) from NGFS scenarios are applied in the form of year-on-year changes.
- The values of these variables at the end of the short term (i.e. 2025) are used as a starting point for the projections of the medium term (i.e. from 2025).

<sup>23</sup> More details are available in Box A of the [ECB's Financial Stability Review \(May 2023\)](#).

- The paths for the medium term start from 2025. This is necessary to be able to compute the year-on-year change between 2025 and 2026 and apply it to the values of 2025.

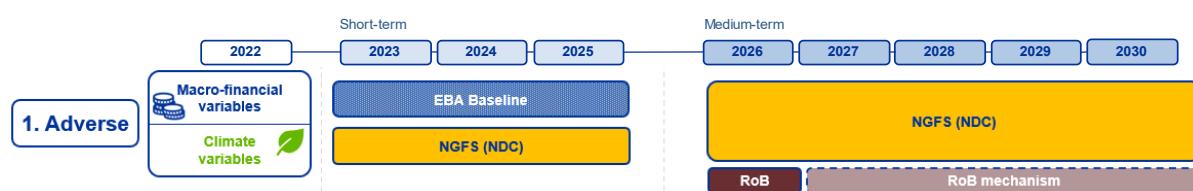
The severity of the EBA and NGFS scenarios used varies based on the narrative of each scenario. In particular, in the Fit-for-55 baseline scenario, the updated baseline scenario of the 2023 EU-wide stress test (Box 1) is combined with the “Nationally Determined Contributions” (NDC) scenario from NGFS (Phase IV). Only the NGFS NDC scenario is used to project climate variables through the whole period. This scenario foresees that currently pledged conditional NDCs are implemented fully, and respective targets on energy and emissions in 2025 and 2030 are reached in all countries, meaning that the Fit-for-55 package is assumed to be fully implemented and the target of a 55% reduction in emissions with respect to 1990 levels is met.

**Figure 3: Baseline scenario elements**



In the first Fit-for-55 adverse scenario, the first three years are modelled in the same way as the baseline scenario, but in 2026, the “run-on-brown” mechanism (defined and explained in the next section) is implemented, generating a macroeconomic shock at the beginning of 2026.<sup>24</sup>

**Figure 4: First adverse scenario elements**

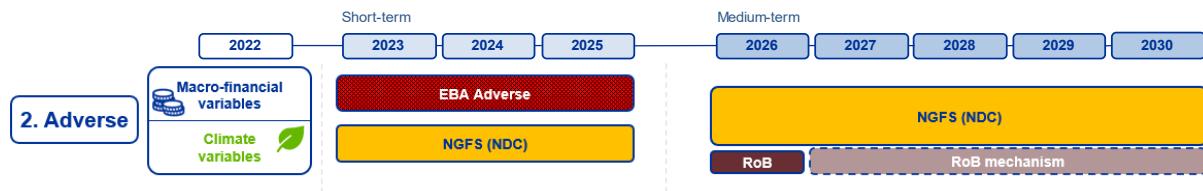


*Notes: The financial sector's loss of confidence will materialise in a single year (2026). However, as the NFCs continue with their green transition, their effective financial constraints are decreasing until the end of the exercise horizon.*

The second Fit-for-55 adverse scenario is structured in the same way as the first adverse scenario, but the transition happens under global adverse macro-financial conditions.<sup>25</sup> Hence, in the short term, the macro-financial variables follow the adverse scenario of the 2023 EU-wide stress test.

<sup>24</sup> The materialisation of physical risk is not taken into account in this exercise per se, as physical risk plays a more important role in the long term. For this exercise, the “reassessment” of physical risks is considered a more plausible assumption than the sudden and simultaneous materialisation of it as a trigger of an adverse scenario. Therefore, the materialisation of physical risk is only considered through its perception via the “run-on-brown” (RoB).

<sup>25</sup> In the Fit-for-55 adverse scenarios, economic activity declines, leading to lower emissions. Therefore, reaching emission reduction goals in adverse scenarios requires less investment.

**Figure 5: Second adverse scenario elements**

*Notes: The financial sector's loss of confidence will materialise in a single year (2026). However, as the NFCs continue with their green transition, their effective financial constraints are decreasing until the end of the exercise horizon.*

### Downscaling of the aggregate data for the euro area

The medium-term scenario paths for euro area inflation, long-term interest rate, real estate prices (CRE and RRE) are drawn by conditioning on the GDP scenarios via a Bayesian VAR model (BVAR). The BVAR model allows one to accurately estimate the dynamics of a large set of variables and then generate projections of such variables depending on several shocks or paths. In particular, the model is estimated using quarterly data at euro area level over the sample Q4 2004-Q4 2022, and then the forecasts are obtained based on the GDP scenarios (baseline, first adverse scenario and second adverse scenario) via the Kalman Filter (Durbin-Koopman simulator smoother) for the period 2026-2030.<sup>26</sup>

These euro area-wide paths are then downscaled to country-level for the period after 2025. The downscaling is performed assuming that the euro area-level dynamics are transmitted to a single country. Specifically, for the years up to and including 2025, values remain in line with those of the EBA/NGFS scenario. From 2026 onwards, values are obtained as follows.

- For the baseline scenario, individual countries are assumed to follow the percentage changes<sup>27</sup> at the euro area level.
- For the first adverse and the second adverse scenarios, the BVAR medium-term dynamic and long-term convergence (2030) are imposed. Specifically, values for country C are obtained as follows:

$$\Delta x_{A,t-2030}^C = \frac{\Delta x_{EA,t-2030}^C}{\Delta x_{EA,A,2025-2030}^C} \times \Delta x_{A,2025-2030}^C \quad (9)$$

<sup>26</sup> The BVAR model is part of the Scenario Expander Toolbox (internal note on "A Scenario Distribution Expander Tool for Stress Testing Analysis," DGMF/STM). The model features Minnesota-type independent Normal-Inverted Wishart priors and it allows for  $t$ -distributed errors. The posterior distribution of coefficients is obtained via the Metropolis-Gibbs sampler. Currently the model is endowed with 18 euro area macro-financial indicators (including GDP, inflation, interest rates and real estate prices).

<sup>27</sup> Specifically, for inflation and changes of RRE and CRE prices, in the baseline scenario, individual countries are assumed to follow the percentage changes at the euro area level; whereas for interest rate, absolute changes are considered instead.

where the long-term levels in the adverse scenarios are obtained as  $x_{A, 2030}^C = x_{B, 2030}^c \times \frac{x_{EA_A, 2030}}{x_{EA_B, 2030}}$ . With  $x_{S, t}^c$  representing the rate of changes of i) inflation, ii) long-term interest rate, iii) CRE prices, and iv) RRE prices for country  $c$ , scenario  $s$  and year  $t$ .

### Electricity price shock

The scenarios of the 2023 EU-wide EBA stress test exercise do not provide information on electricity prices but focus on commodity prices. Therefore, electricity cost dynamics are solely mapped using the NGFS scenario for the whole period until 2030. This results in a series constant across the baseline and both adverse scenarios.

To obviate this, commodity prices from the 2023 EU-wide EBA stress test adverse scenario are used to shock the electricity prices in the second adverse scenario. Specifically, the EBA's adverse scenario assumes an increase of 180% in gas prices, lasting from 2023 to 2025. In addition, oil prices are assumed to increase by 53.9% in 2023 compared with 2022, and then to decrease by 12.5% in the following 2 years, reaching an overall increase of 41.4% in 2025 with respect to 2022 levels.

To translate the gas price and oil price shocks to electricity, the first step is to estimate the elasticities of electricity prices with respect to gas and oil prices. The exercise is inherently complex given the presence of confounding effects caused by the influence of electricity prices on energy demand and thus on its price. However, providing the necessary controls, it is possible to estimate potential impacts on electricity prices based on changes in gas and oil prices alone.

Specifically, the model used to estimate the elasticities is the following:

$$\log(p_{electricity})_{it} = \beta_0 + \beta_1 \log(p_{gas})_{it} + \beta_2 \log(p_{oil})_{it} + \gamma X_{it} + \delta X_{i,t-1}^* + d_i + d_t + \varepsilon_{it} \quad (10)$$

where  $p_{electricity_{it}}$  and  $p_{gas_{it}}$  represent the electricity and gas prices for non-household consumers of EU country  $i$  at year  $t$ .

The data are sourced from Eurostat and are averaged across consumption bands. On the other hand,  $p_{oil}$  represents the average price of oil imported in each country, as expressed in USD per barrel.  $X_{it}$  contains a series of country-specific controls necessary to minimise confounding effects. These controls include the shares of gas, oil and renewables and biofuels in each country's energy transformation inputs and the log of gas and oil final consumption. Data on energy balances and oil prices are also sourced from Eurostat. To control for possible lead-lag effects,  $X_{i,t-1}^*$  contains the same control variables but lagged, including lagged logged values of both gas and oil prices.  $d_i$  and  $d_t$  are country and year-fixed effects. Data are sourced for the 27 EU Member States. While energy mix data are available from 1990, electricity and gas prices observations start from 2007, and oil prices start from 2005. For the latter, average prices for the EU are used in the absence of country-level data. All data are available up until 2021.

**Table 2: Elasticities of electricity prices with respect to gas and oil prices.**

Model Comparison								
Dep. Variable								
Log(Gas Prices)	0.3953*** (0)	0.3476*** (0.0000003472)	0.3493*** (0.00007546)	0.3522*** (0.0001)	0.3508*** (0.0001)	0.3528*** (0.0002)		
Share Input Natural Gas	0.2994** (0.0147)	0.206 (0.1869)	0.1705 (0.3576)	0.0284 (0.8783)	0.1312 (0.4792)	-0.0093 (0.9596)		
Share Input Oil and Petroleum excluding biofuels	1.4609* (0.09)	0.9836 (0.2526)	1.0355 (0.1973)	1.1144* (0.083)	1.0869 (0.117)	0.9532 (0.1131)		
Share Input Renewables and Biofuels	0.1460* (0.0931)	0.0556 (0.6838)	0.0676 (0.6639)	-0.1158 (0.6006)	0.0484 (0.7569)	-0.1377 (0.5348)		
Log(Average Price Barrel Oil)	0.0103 (0.6187)	0.0415 (0.7669)	0.0816 (0.5312)	0.082 (0.4984)	0.0815 (0.5271)	0.0814 (0.4954)		
Log(Final Consumption Natural Gas)	0.2935*** (0.001)	0.2475** (0.0498)	0.2903* (0.0612)	0.2872* (0.0736)	0.1575 (0.3246)	0.1624 (0.3191)		
Log(Final Consumption Oil and Petroleum excluding biofuels)	-0.2346* (0.0782)	-0.1882 (0.2519)	-0.172 (0.3145)	-0.1679 (0.3449)	0.0458 (0.8114)	0.0516 (0.799)		
Lag(1) Log(Gas Prices)			-0.0407 (0.6738)	-0.0492 (0.6013)	-0.0346 (0.7223)	-0.041 (0.6623)	0.1521* (0.0708)	
Lag(1) Log(Average Price Barrel Oil)				-0.2436 (0.1116)	-0.25 (0.1239)	-0.2153 (0.1179)	-0.2182 (0.1406)	-0.0039 (0.9774)
Lag(1) Share Input Natural Gas					0.2418** (0.0112)	0.2291** (0.0116)	0.181 (0.296)	
Lag(1) Share Input Oil and Petroleum excluding biofuels					-0.2115 (0.6664)	0.102 (0.8308)	0.612 (0.3481)	
Lag(1) Share Input Renewables and Biofuels					0.1892 (0.4624)	0.1916 (0.4332)	0.0867 (0.6652)	
Lag(1) Log(Final Consumption Natural Gas)					0.1970*** (0.0036)	0.1948** (0.0205)	0.2707*** (0.0078)	
Lag(1) Log(Final Consumption Oil and Petroleum excluding biofuels)					-0.2424* (0.0845)	-0.2534* (0.0909)	-0.2349 (0.1263)	
Effects	Entity	Entity Time	Entity Time	Entity Time	Entity Time	Entity Time	Entity Time	
Estimator	PanelOLS	PanelOLS	PanelOLS	PanelOLS	PanelOLS	PanelOLS	PanelOLS	
No. Observations	298	298	270	270	270	270	274	
Cov. Est.	Clustered	Clustered	Clustered	Clustered	Clustered	Clustered	Clustered	
R-squared	0.5392	0.2815	0.2703	0.2843	0.2854	0.3001	0.109	
R-Squared (Within)	0.5392	0.5263	0.3135	0.2971	0.3755	0.3685	0.085	
R-Squared (Between)	0.5275	0.3565	0.3952	0.6774	0.0565	0.4875	0.2392	
R-Squared (Overall)	0.5105	0.3376	0.3781	0.6663	0.0261	0.4683	0.2154	
F-statistic	44.473	14.104	9.177	7.2843	8.0231	6.6755	4.004	
P-value (F-stat)	0	0	0	0	0	0	0.0004	

Source: ECB calculations based on Eurostat.

Notes: The independent variable is the country-level log of electricity prices for non-household consumers averaged across consumption bands. The dependent variables include country-level log prices of gas and oils and country-specific controls. The sample spans country-level annual energy data from 1990 to 2021 for EU Member States.

The results in Table 2 show a significantly positive elasticity of electricity prices with respect to gas prices, equivalent to 0.3528 when considering the fully saturated model. It is worth noting that the elasticity with respect to oil prices is not significantly different from zero. This can be attributed to the fact that EU electricity generation relies only marginally on oil.<sup>28</sup> Therefore, the effect of oil price dynamics is likely to influence electricity prices through a shift in demand to gas and consequently its prices, for which it is controlled in the regression.

Therefore, the only significant shock that will affect prices in the years from 2023 to 2025 will be the increased gas prices in the EBA adverse scenario. Using the elasticity calculated in Table 2, electricity prices will increase by 63.5% between 2023 and 2025 with respect to the starting date (2022).

<sup>28</sup> In 2022, 39.4% of EU electricity was generated from renewable energy sources, 38.7% from fossil fuels and 21.9% from nuclear power. Only 1.6% was generated from oil. See “[Infographic – How is EU electricity produced and sold?](#)”, European Council.

## Run-on-brown

The “run-on-brown” (RoB) is the shock that changes the path of the transition from 2026 to 2030. Considering the Fit-for-55 exercise and RoB narrative, it is assumed that the RoB leads financial institutions to charge a premium proportional to firms’ idiosyncratic transition risk. All Fit-for-55 adverse scenarios will incorporate such an exogenous RoB shock, to the same degrees, which is not based on fundamentals but on firms’ degree of “brownness” (idiosyncratic transition risk). Meanwhile, the baseline scenario does not incorporate any RoB shock.

Two important aspects of the RoB shock are the timing of its occurrence and the duration of the NFCs’ adjustment (transition). The RoB shock can be applied in a single year or over the course of multiple years. While the technical implementation of the RoB stays the same, the timing of application is important because it determines the stage of the transition at which brown firms are affected by financial constraints, thereby being more or less affected by an RoB (e.g. if the run starts only in 2029, most brown firms will have already accumulated enough green investments to reduce their brown energy intensity and will therefore be less affected by financial constraints, compared with a case where the run starts early in the transition process). Since “run” usually refers to a rather rapidly culminating event, in this exercise the loss of confidence in the financial sector – and hence the shock – is portrayed in a single year. In the two adverse scenarios, the RoB occurs on 1 January 2026 and negatively affects firms’ profitability. This subsequently leads to lower GVA at country-sector level, and in aggregate to lower GDP levels. The lower GVA and GDP continue until 2030 owing to the ongoing impact of RoB. In terms of narrative, this means that firms and the economy take time to recover from the shock in 2026, with GVA and GDP not fully recovering to baseline levels until 2030.<sup>29</sup>

Granular firm-level information from the ECB climate stress test is used for all modelling steps.<sup>30</sup> The RoB affects NFCs and is calibrated with firm-level data from Orbis, Eurostat and Urgentem. The impact of financial constraints due to the RoB is measured on the basis of changes in the profitability of NFCs (both SMEs and large firms) and subsequently on changes in their credit risk (probabilities of default) and market risk (asset prices).<sup>31</sup> Its technical implementation consists of three main steps:

1. determining an exogenous shock on the financial constraints of firms based on their degree of brownness (and consequently their exposure to RoB);
2. estimating the impact of firms’ financial constraints changes on changes in their profitability;

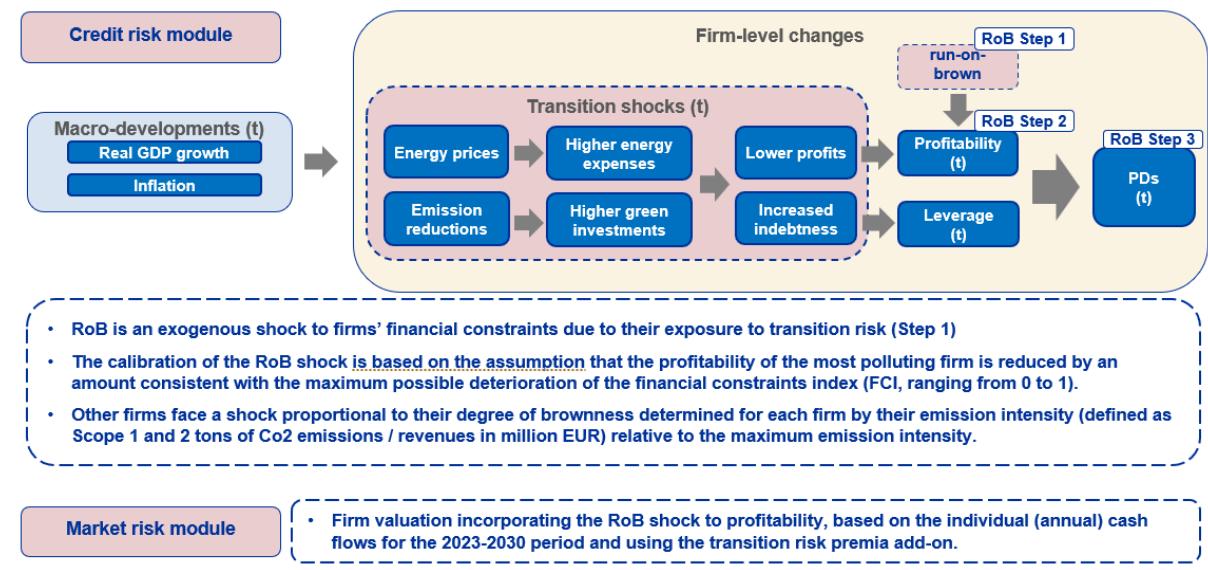
<sup>29</sup> While the RoB shock under adverse macro conditions (i.e. in the second adverse scenario) could lead to non-linearities in the RoB shock (e.g. amplification or compounding effects), capturing non-linearities is currently not within the scope of the climate risk models used. Furthermore, it is assumed that the RoB only affects the GVA and GDP, and not inflation or interest rates.

<sup>30</sup> Or aggregate information downscaled to the firm-level is used (e.g. Eurostat data on energy mix). Although the dataset is generally extensive, firm-level data availability might be lower in the case of smaller countries and in the case of SMEs. Even though every stress-testing exercise has its limitations, either due to model or data imperfections, lower coverage of certain country-sector segments can be particularly visible in some countries, even though on average 80% of AnaCredit loans are covered by the NFCs sample. In terms of sectors, firms in our sample are classified based on the sector of the headquarters. For more information on the dataset, see Annex A of “[ECB economy-wide climate stress test](#)”, *Occasional Paper Series*, No 281, ECB, Frankfurt am Main, September 2021.

<sup>31</sup> Although the commercial real estate exposures and sovereign bond holdings of financial institutions are included in the Fit-for-55 exercise, asset price revaluation shock due to RoB is not performed on those two segments.

3. measuring the impact on credit risk and market risk.

**Figure 6: Transmission mechanism of RoB, compared with other transition risk drivers**



Step 1: Determining an exogenous shock to the financial constraints of firms (and consequently their exposure to RoB)

During the RoB, the financial sector is “running away from the brown industries”, leading to financial constraints for brown firms, either in terms of the withdrawal of funding or the increased cost of financing. The degree of financial constraints that a firm faces due to transition risk is measured with an exogenous shock to the financial constraints index (FCI) developed by Ferrando and Ruggieri (2015).<sup>32</sup> According to their methodology, the relationship between a firm  $i$ 's financial constraints and its balance sheet characteristics at time  $t$  can be explained via the following formula:<sup>33</sup>

$$FCI_t = f(\text{leverage}_{t-1}, \text{profitability}_{t-1}, \text{debt burden}_{t-1}, \text{cash holdings}_{t-1}, \text{size}_{t-1}, \text{age}_{t-1}), \quad (11)$$

The higher the value of the FCI, the more intense its financial constraints are. The FCI becomes the vehicle for transposing the RoB shock to firm-level profitability and eventually to their financial risk.<sup>34</sup> However, firms' FCIs are

<sup>32</sup> “Financial constraints and productivity: evidence from euro area companies”, ECB Working Paper Series, No 1823, ECB, Frankfurt am Main, July 2015.

<sup>33</sup> Size is a categorical variable indicating whether a firm is large, medium or small at the starting point, according to the European Commission's definition.

<sup>34</sup> The RoB shock comes in addition to all other transition risk shocks incorporated in the scenarios and credit and market risk models. The two other main transition risk shocks to firms' financial risk are the increase in energy expenses (leading to lower profits) and the increase in green investments to reduce carbon emissions (leading to higher leverage), which both affect PDs and security prices. See Step 3 for more details.

recalibrated according to this methodology only for backward-looking analysis in order to recalibrate coefficients for measuring the impact of changes in firms' financial constraints on changes in their profitability (see Step 2 below).

For Step 1, the idiosyncratic transition risk (or "brownness") of firms determines the exogenous increase of their FCI and therefore their exposure to RoB. The calibration of the RoB shock assumes that the profitability of the most polluting firm is reduced by an amount consistent with the maximum possible deterioration of the FCI, ranging between 0 and 1. Other firms face a shock proportional to their degree of brownness, determined by each firms' brown energy intensity (defined as brown energy consumption in MWh/revenues in EUR million) relative to the maximum brown energy intensity:<sup>35</sup>

$$FCI_{it}^{ROB} = \frac{\text{brown energy intensity}_{it}}{\max(\text{brown energy intensity})_t} \quad (12)$$

#### Step 2: Translating firms' financial constraints to changes in their profitability

In this step, the exogenous shock on firms' financial constraints is translated to changes in firm-level profitability. This is performed by replicating the methodology of Ferrando and Ruggieri (2015) with coefficients that measure the changes in profitability due to changes in the FCI, recalibrated at sector level<sup>36</sup> (Table 3) and with firm-level data from Orbis between 2000 and 2019. We employ the following regression:

$$\text{profitability}_{it} = \beta_0 + \beta_1 l_{it} + \beta_2 k_{it} + \beta_3 FCI_{it} + d_i + d_t + \varepsilon_{it} \quad (13)$$

where profitability is defined as operating EBIT over total assets,  $i$  and  $t$  are the cross-sectional (firm-level) and time dimensions respectively,  $l$  is the natural log of number of employees,  $k$  is the natural log of capital inputs (measured as total fixed assets), and FCI is the backward-looking measure of financial constraints (based on equation 11), while  $d(i)$  and  $d(t)$  are firm-specific and year dummies. The regressions for each sector in the sample are run separately. The main coefficient of interest is  $\beta_3$ . The relationship between financial conditions and profitability is negative. However, the marginal effects of FCI on profitability vary substantially across sectors, confirming the rationale for using granular data when possible.

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<sup>35</sup> Brown energy consumption concerns the consumption of gas, oil and coal. The firm-level data is derived by downscaling country-sector level energy mix information from Eurostat to energy consumption in MWh by energy source at firm-level. With conversion factors, the absolute emissions data from Urgentem are translated to energy consumption by source based on the energy mix information from Eurostat. Extreme values for brown energy consumption are winsorised at the 95th percentile. The methodology could also be implemented by calibrating more aggregate shocks (e.g. at country-sector level) rather than firm-specific shocks. However, this approach more effectively takes into account distributional aspects in case of highly heterogenous degrees of brownness across firms in a given country-sector.

<sup>36</sup> For calibrating sector-level coefficients for profitability shocks, firm-level data for euro area country firms are used due to better data coverage and quality. The same coefficients are used for non-euro area firms.

**Table 3: Sector-level coefficients on the change in firm-level profitability based on changes in firm-level financial constraints.**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
log(number of ~)	0.004*** (0.000)	0.012*** (0.000)	0.009*** (0.001)	0.007*** (0.000)	0.011*** (0.000)	0.005*** (0.000)	0.003*** (0.000)	0.005*** (0.000)	0.005*** (0.000)
log(fixed assets)	-0.007*** (0.000)	-0.002*** (0.000)	-0.006*** (0.000)	-0.004*** (0.000)	-0.004*** (0.000)	-0.005*** (0.000)	-0.003*** (0.000)	-0.004*** (0.000)	-0.002*** (0.000)
FCI-hat	-0.036*** (0.003)	-0.061*** (0.002)	-0.076*** (0.008)	-0.096*** (0.003)	-0.092*** (0.002)	-0.076*** (0.003)	-0.045*** (0.002)	-0.068*** (0.004)	-0.070*** (0.002)
Observations	508993	1243900	83514	746985	1483897	753361	751084	383839	1391526
R-squared	0.423	0.389	0.422	0.392	0.415	0.414	0.466	0.363	0.456
Firm FE	Yes								
Year FE	Yes								

Source: ECB calculations based on Orbis data and Ferrando and Ruggieri (2015).

Notes: "Financial constraints and productivity: evidence from euro area companies", ECB Working Paper Series, No 1823, July 2015. Columns represent sector-level samples as follows: (1) Accommodation and goods activities, (2) Construction and real estate, (3) Energy, gas and water supply, (4) Information, communication and R&D, (5) Manufacturing, (6) Other business activities, (7) Retail trade, (8) Transport and storage, (9) Wholesale trade. The dependent variable is firm-level profitability, defined as operating EBIT over total assets. The sample spans firm-level annual balance sheet data between 2000 and 2019 from euro area countries. FCI-hat stands for financial constraint index, predicted with the same sample and based on the methodology of Ferrando and Ruggieri (2015).

### Step 3: Measuring the impact on credit risk and market risk

Finally, changes in profitability due to RoB (and other transition risk shocks) enter the balance sheets of creditors. Using the firm-level credit risk module of the ECB top-down climate stress test framework<sup>37</sup>, changes in firm-level probabilities of default (PDs) are estimated based on changes in firms' profitability and leverage with the following logit specification:

$$\widehat{PD}_t^{i,s} = \alpha + \beta_1 \widehat{\text{leverage}}_t^{i,s} + \beta_2 \widehat{\text{profitability}}_t^{i,s} + \epsilon_t^i \quad (14)$$

Where leverage is defined as total liabilities over total assets and profitability is defined as net earnings before taxes (operating EBIT). In this case, leverage and profitability correspond to firm-level projected balance sheet items and include firm-level, exogenous transition risk shocks (including RoB) as follows:

$$\widehat{\text{leverage}}_t^{i,s} = f(TA_{t-1,i,t}, GDP_{t,s}, \text{inflation}_{t,s}, \text{green investments}_{i,t,s} f(\text{Scope 1,2 emissions})) \quad (15)$$

$$\widehat{\text{profitability}}_t^{i,s} = f(TA_{t-1,i,t}, GDP_{t,s}, \text{inflation}_{t,s}, \text{energy expenses}_{i,t,s} f(\text{Scope 1,2 emissions, energy mix}), \text{amortization}_{i,t,s} f(\text{green investments}_{i,t,s}), \text{interest expenses}_{i,t,s} f(\text{green investments}_{i,t,s}), \text{Run-on-Brown}_{i,t,s}) \quad (16)$$

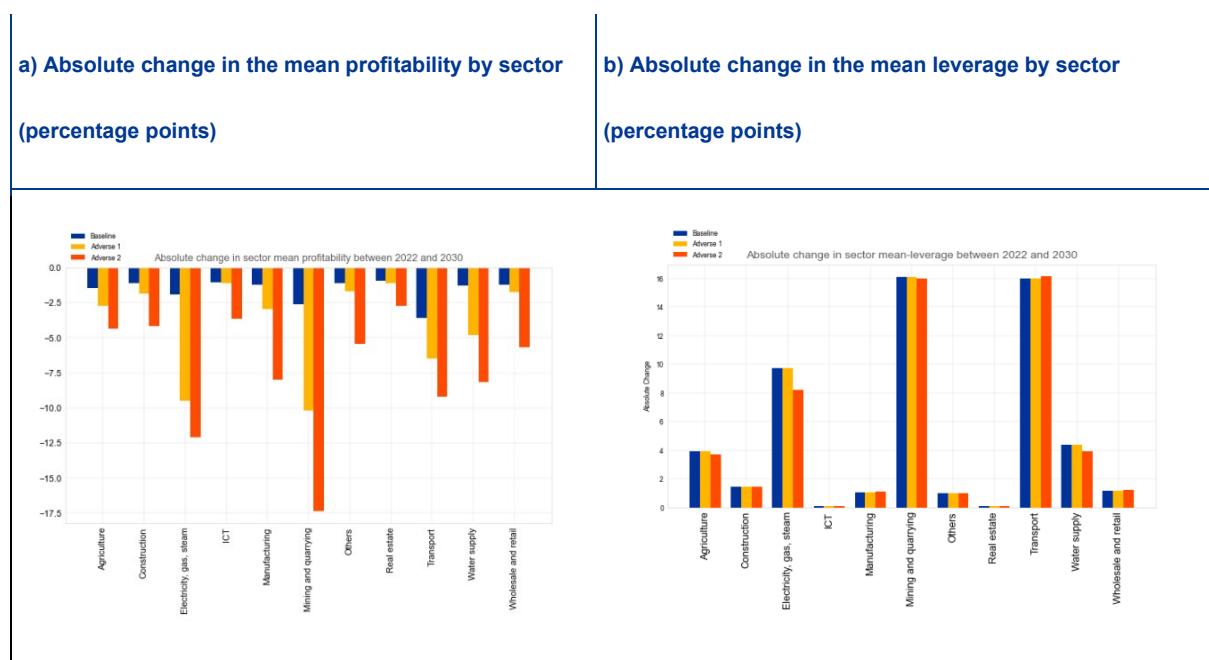
In formula (16), the component "RoB" inside the function corresponds to the effect  $\beta_3 FCI_{it}^{ROB}$ , whose coefficient is measured with equation (2). Green investments are green energy-related investment needs at country-sector level

<sup>37</sup> See Annex A2, in "The Road to Paris: stress testing the transition towards a net-zero economy", op. cit, for further details on the credit risk model.

(based on calculations from the European Commission)<sup>38</sup> and broken down at firm level. GDP, inflation and interest rates are Fit-for-55 scenario variables. Scope 1 and 2 emissions and energy expenses<sup>39</sup> are at the firm level, and their relative change moves according to the Fit-for-55 scenario scenarios.

The resulting firm-level PDs, driven by firms' leverage and profitability that include the impact of the RoB (Figure 7), are averaged by country-sector and translated into valuation shocks to the assets included in the exercise.

**Figure 7: Change in the drivers of profitability of default (profitability and leverage) between 2022 and 2030 by scenario**



## Equity price shocks

The equity price shocks are calibrated at country-sector level by combining net present value (NPV) and Gordon growth models (GGM) in the following way.

<sup>38</sup> See Chart 4 in the box entitled “**Fiscal policies to mitigate climate change in the euro area**”, *Economic Bulletin*, Issue 6, ECB, 2022, for further reference. Country-sector level green investments are allocated to individual firms based on their share of projected cumulative renewable energy consumption needs between 2022 and 2030, relative to total projected cumulative renewable energy consumption needs between 2030 and 2022 in each country-sector. It is assumed that green investments are entirely financed via additional debt, therefore increasing liabilities and leverage. The rate of amortisation is 25 which corresponds to the average amortisation rate of solar and wind energy.

<sup>39</sup> Firms' share of green energy in their energy mix increases over time. It is assumed that direct green energy consumption is “cost-free” (besides the initial investment) and therefore does not increase energy expenses. Energy expenses are obtained as follows: 1) by breaking down firm-level emissions into energy consumption in GWh for the starting point (2022), based on country-sector level energy mix information from Eurostat and emissions-to-energy consumption conversion rates by source from the IPCC; 2) by projecting forward firm-level energy consumption by source, based on the energy consumption path by source in the Fit-for-55 scenarios (based on the NGFS scenario). The projected energy consumption multiplied by the projection of energy prices by source gives the energy expenses for each firm. More information can be found in Annexes A1 and A2 of “**The Road to Paris: stress testing the transition towards a net-zero economy**”, op. cit.

- For the 2023-2030 time horizon: the NPV methodology is used, in order to take into account the specificity of the projected path of profitability of firms in a given country-sector calibrated in the scenarios.
- For the years after 2030: the GGM<sup>40</sup> is used to account for the value of the average firm in a given country-sector after the time horizon specific to this exercise. The model assumes that dividends grow at a constant rate in perpetuity and therefore provide the present value of the infinite series of future dividends.

However, the GGM is more suited to larger, more stable firms that regularly pay dividends. Considering the specificity of the exercise, it is more appropriate to perform the valuation each year and apply the GGM only for the period after the exercise.<sup>41</sup>

In order to compute the shocks, the price of equity for each of the three scenarios in 2023 was computed by considering the following discount rate:

$$r_{free} + \beta * (Eq_{RP}) + Transition_{RP}$$

and comparing this rate with the price computed in 2023, with a discount rate that does not include the transition risk premia  $r_{free} + \beta * (Eq_{RP})$ . This allows one to take into account a reappraisal of the market of the transition of firms in the baseline and two adverse Fit-for-55 scenarios in the years between 2023 and 2030.

The “Transition risk premia” are calibrated as the average value, in a given country-sector, of the brownness indicator calibrated above, multiplied by a fixed rate of 3.2%, estimated based on literature.<sup>42</sup>

Before the discounting of the values, a three-step procedure is needed.

### **1. Defining the cash flows (Net earnings valuation instead of actual dividends)**

To generate comparable cash flows between the firms, it is assumed that firms pay all earnings from a single year in the form of dividends. The rationale is that both dividends and retained earnings belong to the owners. Therefore, it is considered that the dynamics of the present value of profits reflect the dynamics of firm value.

### **2. Structuring the discount rate - including the transition risk into the discount rate**

When the RoB occurs, the firm-specific transition risk premia increase. However, as the firm goes through the green transition, these premia decrease, leading to a lower discount rate and, subsequently, a higher

<sup>40</sup> An alternative approach, like free cash flow valuation, requires more detailed information about the companies (such as working capital, depreciation or R&D costs).

<sup>41</sup> Although the exercise ends with 2030, the investors are still interested in the period after this, as they see the company as a going concern. However, the period after 2030 is more affected by the discounting technique.

<sup>42</sup> See “**Transition versus physical climate risk pricing in European financial markets: a text-based approach**”, *Working Paper Series*, No 2677, ECB, Frankfurt am Main, July 2022.

valuation. The rationale is that even though firm owners are usually aware of the transition risk, the change of confidence in the transition coming from the creditors will result in an increased risk premium from owners as well. These premia increase in the first year of RoB, but given that the firm is decreasing its emissions (from the mandate), these premia will decrease accordingly.

The discount rate structuring is based on the Capital Asset Pricing Model:

$$k_s = r_{free} + \beta * (Eq_{RP}) + Transition_{RP} \quad (17)$$

Where:

- $k_s$  – discount rate;
- $r_{free}$  – risk-free rate;
- $\beta$  – average betas at country-sector, which, for robustness purposes, we assume to be constant for every country-sector;
- $Eq_{RP}$  – equity risk premia (market return – risk-free rate), where the market return is assumed to be 10%, which is the average growth of the market;
- $Transition_{RP}$  – firm brownness indicator \* maximal transition risk premia.<sup>43</sup>

### 3. Splitting the sample

Since GGM is well suited for firms with stable growth, to make this model usable for the Fit-for-55 one-off scenario analysis exercise, the timeline needs to be divided into stable and unstable periods. The periods before 2023 and after 2030 are considered stable and allow for the application of GGM, but they do not enter the calculations. However, the period between 2023 and 2030 is considered unstable and requires individual discounting of cash flows. The growth rate is the average growth rate of the EU economy, estimated by the NGFS NDC scenario from 2030 to 2040, and it is approximately 1%. The discount rate used for the period after 2030 does not include the transition risk premia, because firms are assumed to transition before 2030.

In addition, the benchmark price, against which the shock is calibrated, is computed as the baseline scenario but excluding the transition risk premium from the discount rate. It is assumed that before the

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<sup>43</sup> For the maximal transition risk premia, the difference between high and low transition risk portfolios is used. This quantification is published in “[Transition versus physical climate risk pricing in European financial markets: a text-based approach](#)”, ibid.

start of the scenarios, the market does not, when pricing the equity stocks, consider the climate transition that firms have to implement.

For each scenario, the equity shock is estimated as the percentage change of the estimated equity prices and the benchmark.

### CRE and RRE price shocks

In order to calibrate commercial and residential real estate price shocks, the CRE and RRE prices are projected consistently with the other macro variables, applying the methodology explained above (see “Downscaling of the aggregate data for the euro area”).

- For the EU Member States, and the EU and the euro area as aggregates, the CRE and RRE prices are projected by downscaling the paths of the CRE and RRE growth rates coming from the BVAR.
- For the other economies, they are projected by combining the EBA and NGFS NDC scenarios. Considering that CRE highly correlates with RRE for the period between 2026 and 2030, they are both projected using the path of the variable “House prices” from the NGFS NDC scenario.

The shocks to CRE and RRE prices are computed and represent the percentage change between 2022 and 2030.

### Scenario market risk shocks

#### 1. Corporate bond spread shocks

In order to extract the corporate bond spread shock corresponding to the deviation in PD, a sensitivity parameter is applied to the cumulative PD shock over the horizon of the exercise. More specifically, depending on a firm’s rating, a parameter is chosen (Table 4).<sup>44</sup> Firms’ ratings, provided by external credit assessment institutions, are mapped into credit quality steps (CQS) for the purpose of standardisation. In case of missing ratings, the level of PDs is mapped into CQS.<sup>45</sup> This is a standard approach which was also followed during the EU-wide EBA stress test exercises.

<sup>44</sup> See Annex A4 of “[The Road to Paris: stress testing the transition towards a net-zero economy](#)”, op. cit.

<sup>45</sup> See Annexes I and III of [Commission Implementing Regulation \(EU\) 2016/1799](#) (OJ L 275, 12.10.2016, p. 3).

**Table 4: Corporate bond spread sensitivity parameters by CQS steps.**

CQS step	Sensitivity parameter
1 to 2	0.917700231
3	1.543286897
4 to 6	2.168873562

This methodology is employed for euro area country-sectors, for which a PD model is available. To expand the shock coverage beyond the euro area countries, iBoxx data on corporate bond spreads are used in conjunction with the ECB's Financial Shock Simulator (FSS) tool.<sup>46</sup> In this context, the average euro area shocks by credit step trigger the simulated shocks to non-euro area countries corporate bond spreads and the average response (conditional mean return) by step of the conditioned variables is taken. Since iBoxx data granularity does not split across NACE sectors within the corporate aggregate, the conditioned average shock by step is distributed across NACE sectors of each non-euro area country, based on the same distribution of sectors around the mean observed for the euro area average. This last step occurs separately for each CQS bucket in each country.

Moreover, in order to guarantee consistency within all the scenarios, country-level shocks to government bond spreads are set as a lower bound for the corresponding corporate bond spread shocks.

## 2. Stock market shock

Equity shocks are expanded to non-EU Member States at NACE sector level, following the methodology used for the corporate bond spread shocks. The FSS tool is used to calibrate the average country-level shocks depending on the EU average equity shock. In the next step, NACE-level shocks by country are derived following the same distribution of EU sectors around the EU average shocks.

## 3. Swap rates, government bond spreads and RMBS spread shocks

With regard to swap rates and government bond spread shocks, the baseline scenario and the first adverse scenario are calibrated via the FSS tool, by using the climate-related shock as trigger. The difference between baseline and the first adverse scenario reflects the additional shock driven by RoB (which does not affect the baseline scenario). The second adverse scenario is anchored to the adverse scenario of the 2023 EU-wide EBA stress test and includes the additional RoB shock, as in the first adverse scenario.

<sup>46</sup> See Annex 3.5 of "Macro-financial scenario for the 2020 EU-wide banking sector stress test", pp. 36-40.

Finally, the FSS tool at quarterly frequency is employed to calibrate shocks to RMBS spreads that are triggered by the RRE price shocks.

### Detailed tables

**Table A1. Real GDP (index=2022)**

		GDP (index=2022)																										
Country		B								A1								A2										
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030
AT	1.00	1.01	1.02	1.04	1.05	1.07	1.08	1.10	1.11	1.00	1.01	1.02	1.04	1.03	1.05	1.06	1.08	1.09	1.00	0.97	0.93	0.95	0.94	0.96	0.97	0.98	1.00	
BE	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.00	1.01	1.03	1.04	1.04	1.06	1.07	1.09	1.10	1.00	0.97	0.93	0.94	0.94	0.96	0.97	0.99	1.00	
BG	1.00	1.01	1.04	1.08	1.11	1.13	1.16	1.18	1.20	1.00	1.01	1.04	1.08	1.09	1.11	1.14	1.16	1.18	1.00	0.96	0.94	0.96	0.98	1.00	1.02	1.04		
CY	1.00	1.03	1.05	1.09	1.11	1.13	1.15	1.16	1.17	1.00	1.03	1.05	1.09	1.09	1.11	1.13	1.14	1.15	1.00	0.98	0.94	0.95	0.96	0.98	0.99	1.00	1.01	
CZ	1.00	1.00	1.02	1.05	1.05	1.07	1.08	1.10	1.11	1.00	1.00	1.02	1.05	1.03	1.05	1.06	1.07	1.09	1.00	0.95	0.91	0.93	0.92	0.93	0.94	0.96	0.97	
DE	1.00	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.05	1.00	1.00	1.01	1.02	1.01	1.01	1.02	1.03	1.04	1.00	0.95	0.91	0.94	0.92	0.93	0.93	0.94	0.95	
DK	1.00	1.02	1.03	1.04	1.06	1.07	1.08	1.10	1.12	1.00	1.02	1.03	1.04	1.04	1.05	1.07	1.08	1.10	1.00	0.96	0.92	0.92	0.92	0.93	0.94	0.96	0.97	
EA	1.00	1.01	1.02	1.04	1.06	1.07	1.08	1.10	1.11	1.00	1.01	1.02	1.04	1.04	1.05	1.07	1.08	1.09	1.00	0.97	0.93	0.94	0.94	0.95	0.96	0.98	0.99	
EE	1.00	0.99	1.02	1.05	1.07	1.09	1.11	1.12	1.14	1.00	0.99	1.02	1.05	1.05	1.05	1.07	1.09	1.10	1.12	1.00	0.96	0.94	0.94	0.94	0.96	0.97	0.99	1.00
ES	1.00	1.02	1.05	1.07	1.09	1.11	1.13	1.15	1.16	1.00	1.02	1.05	1.07	1.07	1.09	1.11	1.13	1.15	1.00	0.97	0.95	0.95	0.95	0.97	0.99	1.00	1.02	
EU	1.00	1.01	1.02	1.04	1.06	1.07	1.08	1.10	1.11	1.00	1.01	1.02	1.04	1.04	1.05	1.07	1.08	1.09	1.00	0.97	0.92	0.94	0.94	0.95	0.96	0.97	0.98	
FI	1.00	1.00	1.00	1.02	1.02	1.03	1.04	1.04	1.05	1.00	1.00	1.02	1.02	1.01	1.01	1.02	1.03	1.04	1.00	0.96	0.93	0.94	0.93	0.94	0.94	0.95	0.96	
FR	1.00	1.01	1.02	1.03	1.05	1.06	1.08	1.09	1.11	1.00	1.01	1.02	1.03	1.03	1.05	1.06	1.08	1.09	1.00	0.97	0.93	0.94	0.94	0.96	0.97	0.98	1.00	
GR	1.00	1.02	1.05	1.08	1.11	1.13	1.15	1.16	1.17	1.00	1.02	1.05	1.08	1.09	1.11	1.13	1.14	1.15	1.00	0.98	0.94	0.95	0.95	0.97	0.99	1.00	1.00	
HR	1.00	1.03	1.06	1.08	1.12	1.15	1.18	1.20	1.21	1.00	1.03	1.06	1.08	1.10	1.13	1.16	1.18	1.19	1.00	0.97	0.92	0.93	0.95	0.97	1.00	1.01	1.03	
HU	1.00	1.00	1.04	1.07	1.10	1.12	1.15	1.18	1.21	1.00	1.00	1.04	1.07	1.08	1.11	1.13	1.16	1.19	1.00	0.96	0.92	0.96	0.97	0.99	1.01	1.04	1.06	
IE	1.00	1.06	1.12	1.18	1.25	1.31	1.36	1.41	1.44	1.00	1.06	1.12	1.18	1.22	1.28	1.33	1.38	1.41	1.00	0.99	0.95	0.96	0.99	1.04	1.09	1.12	1.15	
IT	1.00	1.01	1.02	1.03	1.05	1.06	1.07	1.08	1.08	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.07	1.00	0.97	0.92	0.93	0.93	0.94	0.95	0.96	0.96	
LT	1.00	0.99	1.01	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.99	1.01	1.05	1.03	1.04	1.05	1.06	1.07	1.00	0.98	0.96	0.95	0.94	0.95	0.96	0.97	0.98	
LU	1.00	1.02	1.04	1.07	1.08	1.10	1.11	1.12	1.13	1.00	1.02	1.04	1.07	1.07	1.08	1.10	1.11	1.12	1.00	0.97	0.94	0.94	0.94	0.95	0.97	0.98	0.99	
LV	1.00	1.01	1.04	1.08	1.10	1.11	1.14	1.16	1.20	1.00	1.01	1.04	1.08	1.08	1.09	1.12	1.14	1.17	1.00	0.96	0.93	0.96	0.95	0.97	0.99	1.01	1.04	
MT	1.00	1.04	1.08	1.12	1.14	1.16	1.18	1.19	1.21	1.00	1.04	1.08	1.12	1.13	1.15	1.16	1.18	1.19	1.00	1.00	0.94	0.95	0.97	0.98	0.99	1.00	1.00	
NL	1.00	1.01	1.02	1.03	1.05	1.06	1.08	1.09	1.10	1.00	1.01	1.02	1.03	1.03	1.05	1.06	1.07	1.09	1.00	0.98	0.94	0.95	0.96	0.97	0.98	0.99	0.99	
PL	1.00	1.01	1.03	1.06	1.09	1.11	1.13	1.16	1.18	1.00	1.01	1.03	1.06	1.07	1.09	1.11	1.14	1.16	1.00	0.97	0.92	0.94	0.95	0.97	0.99	1.01	1.03	
PT	1.00	1.03	1.05	1.08	1.10	1.12	1.14	1.16	1.17	1.00	1.03	1.05	1.08	1.08	1.10	1.12	1.14	1.15	1.00	0.98	0.95	0.95	0.96	0.98	0.99	1.01	1.02	
RO	1.00	1.02	1.03	1.03	1.05	1.08	1.10	1.13	1.16	1.00	1.02	1.03	1.03	1.03	1.06	1.08	1.11	1.14	1.00	0.97	0.92	0.95	0.95	0.98	1.00	1.02	1.05	
SE	1.00	0.99	0.99	1.01	1.02	1.03	1.04	1.06	1.07	1.00	0.99	0.99	1.01	1.00	1.01	1.02	1.04	1.06	1.00	0.95	0.91	0.92	0.91	0.92	0.94	0.95	0.97	
SI	1.00	1.02	1.04	1.07	1.09	1.12	1.14	1.16	1.18	1.00	1.02	1.04	1.07	1.07	1.10	1.12	1.14	1.16	1.00	0.99	0.96	0.96	0.96	0.98	1.00	1.02	1.04	
SK	1.00	1.01	1.05	1.08	1.09	1.11	1.13	1.16	1.19	1.00	1.01	1.05	1.08	1.07	1.09	1.11	1.14	1.16	1.00	0.96	0.92	0.95	0.94	0.96	0.97	1.00	1.02	
CA	1.00	1.01	1.03	1.05	1.07	1.09	1.11	1.13	1.15	1.00	1.01	1.03	1.05	1.07	1.09	1.11	1.13	1.15	1.00	0.94	0.92	0.95	0.97	0.98	1.00	1.02	1.03	
CH	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.12	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.12	1.00	0.94	0.92	0.94	0.95	0.96	0.98	1.00	1.02	
JP	1.00	1.02	1.03	1.04	1.05	1.06	1.07	1.07	1.00	1.02	1.03	1.04	1.05	1.05	1.06	1.07	1.07	1.00	0.96	0.94	0.92	0.93	0.93	0.94	0.95	0.95		
NO	1.00	1.03	1.05	1.07	1.09	1.11	1.13	1.14	1.16	1.00	1.03	1.05	1.07	1.09	1.11	1.13	1.14	1.16	1.00	0.96	0.95	0.95	0.97	0.99	1.00	1.02	1.03	
UK	1.00	1.00	1.01	1.03	1.05	1.08	1.10	1.12	1.14	1.00	1.00	1.01	1.03	1.05	1.08	1.10	1.12	1.14	1.00	0.95	0.91	0.92	0.94	0.96	0.98	0.99	1.01	
US	1.00	1.01	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	1.01	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	0.94	0.94	0.95	0.95	0.98	1.00	1.02	1.04	

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**Table A2. Real GVA (index=2022)**

		GVA (index=2022)																											
Country	NACE code	B							A1							A2													
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	
AT	A	1.00	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.00	1.00	1.01	1.03	1.01	1.03	1.04	1.06	1.07	1.00	0.96	0.92	0.93	0.92	0.93	0.95	0.96	0.97	
	B	1.00	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	0.99	1.00	1.02	1.03	1.04	1.00	0.94	0.81	0.95	0.89	0.90	0.91	0.93	0.94	
	C	1.00	1.01	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.00	1.01	1.02	1.04	1.02	1.04	1.05	1.06	1.08	1.00	0.94	0.87	0.90	0.88	0.89	0.91	0.92	0.93	
	D	1.00	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.14	1.00	1.02	1.04	1.06	0.99	1.01	1.02	1.04	1.05	1.00	0.84	0.55	0.96	0.90	0.92	0.93	0.94	0.96	
	E	1.00	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.13	1.00	1.02	1.04	1.06	1.00	1.01	1.03	1.04	1.06	1.00	0.99	0.95	0.96	0.91	0.93	0.94	0.95	0.97	
	F	1.00	0.98	0.99	1.00	1.02	1.03	1.05	1.06	1.08	1.00	0.98	0.99	1.00	0.99	1.00	1.02	1.03	1.05	1.00	0.96	0.93	0.94	0.92	0.93	0.95	0.96	0.97	
	G	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11	1.13	1.00	1.01	1.03	1.05	1.06	1.07	1.09	1.10	1.12	1.00	0.98	0.96	0.96	0.97	0.98	1.00	1.01	1.03	
	H	1.00	1.02	1.03	1.05	1.06	1.08	1.09	1.11	1.13	1.00	1.02	1.03	1.05	1.00	1.02	1.03	1.05	1.06	1.00	0.96	0.90	0.91	0.87	0.88	0.89	0.91	0.92	
	I	1.00	1.05	1.06	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.06	1.05	1.05	1.05	1.05	1.06	1.08	1.09	1.11	1.00	0.98	0.96	0.96	0.98	0.99	1.00	1.01	1.02
	J	1.00	1.01	1.03	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.01	1.03	1.05	1.07	1.08	1.10	1.11	1.13	1.00	0.98	0.95	0.96	0.97	0.99	1.00	1.02	1.03	
	K	1.00	0.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.00	0.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.00	0.97	0.96	0.97	0.98	0.99	1.01	1.03	1.04	
	L	1.00	0.98	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.00	0.98	1.00	1.01	1.02	1.04	1.05	1.07	1.08	1.00	0.96	0.93	0.94	0.95	0.97	0.98	0.99	1.01	
	M	1.00	0.99	1.02	1.05	1.06	1.08	1.09	1.11	1.12	1.00	0.99	1.02	1.05	1.05	1.07	1.08	1.10	1.11	1.00	0.95	0.93	0.94	0.95	0.96	0.98	0.99	1.00	
	N	1.00	0.99	1.02	1.05	1.06	1.08	1.09	1.11	1.12	1.00	0.99	1.02	1.05	1.05	1.07	1.09	1.10	1.12	1.00	0.95	0.93	0.94	0.95	0.97	0.98	0.99	1.00	
	O	1.00	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.00	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.00	0.98	0.96	0.97	0.95	0.97	0.98	1.00	1.04	
	P	1.00	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.00	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.00	0.98	0.96	0.98	0.99	1.00	1.01	1.03	1.04	
	Q	1.00	1.00	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.00	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.00	0.98	0.96	0.98	0.99	1.00	1.01	1.03	1.04	
	R	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.11	1.12	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.00	0.97	0.98	0.98	0.99	1.01	1.02	1.04	1.04	
	S	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.11	1.12	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.00	0.97	0.98	0.98	0.99	1.01	1.02	1.04	1.04	
	T	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.11	1.12	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.00	0.97	0.98	0.98	0.99	1.00	1.01	1.03	1.04	
	U	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.11	1.12	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.00	0.97	0.98	0.99	1.00	1.02	1.03	1.05	1.05	
BE	A	1.00	0.98	0.99	1.00	1.01	1.03	1.05	1.06	1.08	1.00	0.98	0.99	1.00	0.99	1.00	1.02	1.03	1.05	1.00	0.94	0.87	0.89	0.88	0.89	0.91	0.92	0.93	
	B	1.00	1.01	1.02	1.02	1.04	1.06	1.07	1.09	1.10	1.00	1.01	1.02	1.02	0.96	0.98	0.99	1.01	1.02	1.00	0.95	0.87	0.89	0.88	0.86	0.88	0.89	0.90	
	C	1.00	1.01	1.02	1.03	1.04	1.06	1.08	1.09	1.11	1.00	1.01	1.02	1.03	1.01	1.02	1.03	1.05	1.06	1.00	0.93	0.81	0.89	0.87	0.88	0.90	0.91	0.92	
	D	1.00	1.01	1.02	1.03	1.05	1.06	1.08	1.09	1.11	1.00	1.01	1.02	1.03	1.01	1.02	1.03	1.05	1.06	1.00	0.93	0.91	0.92	0.93	0.94	0.95	0.96	0.97	
	E	1.00	1.01	1.03	1.04	1.05	1.07	1.09	1.10	1.12	1.00	1.01	1.03	1.04	1.04	1.05	1.07	1.09	1.10	1.00	0.97	0.92	0.94	0.89	0.90	0.92	0.93	0.94	
	F	1.00	1.02	1.04	1.05	1.07	1.09	1.10	1.12	1.13	1.00	1.02	1.04	1.05	1.05	1.07	1.09	1.10	1.12	1.00	0.98	0.93	0.94	0.95	0.96	0.98	0.99	1.00	
	G	1.00	1.03	1.04	1.05	1.06	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	1.05	1.07	1.09	1.10	1.12	1.00	0.98	0.93	0.93	0.94	0.95	0.96	0.98	0.99	
	H	1.00	1.02	1.03	1.04	1.06	1.07	1.09	1.10	1.12	1.00	1.02	1.03	1.04	1.04	1.06	1.08	1.10	1.12	1.00	0.97	0.91	0.92	0.93	0.94	0.95	0.96	0.97	
	I	1.00	1.04	1.06	1.07	1.09	1.11	1.12	1.14	1.15	1.00	1.01	1.02	1.04	1.06	1.07	1.09	1.10	1.15	1.00	0.96	0.97	0.99	0.99	1.00	1.02	1.03	1.03	
	J	1.00	1.02	1.04	1.05	1.07	1.09	1.11	1.12	1.14	1.00	1.02	1.05	1.05	1.05	1.06	1.07	1.09	1.10	1.00	0.97	0.91	0.95	0.97	0.99	1.01	1.03	1.07	
	K	1.00	1.03	1.07	1.11	1.14	1.16	1.19	1.21	1.23	1.00	1.03	1.07	1.11	1.14	1.16	1.18	1.21	1.23	1.00	0.98	0.96	0.97	1.00	1.02	1.04	1.06	1.08	
	L	1.00	1.09	1.12	1.14	1.17	1.19	1.21	1.23	1.25	1.00	1.02	1.05	1.09	1.11	1.14	1.16	1.18	1.20	1.00	0.98	0.96	0.97	0.99	1.01	1.03	1.05	1.07	
	M	1.00	1.02	1.04	1.08	1.10	1.13	1.15	1.17	1.19	1.00	1.02	1.04	1.08	1.08	1.09	1.12	1.14	1.16	1.00	0.96	0.94	0.95	0.96	0.98	1.00	1.02	1.04	
	N	1.00	1.02	1.04	1.08	1.10	1.13	1.15	1.17	1.19	1.00	1.02	1.04	1.08	1.10	1.12	1.14	1.16	1.19	1.00	0.96	0.94	0.95	0.96	0.98	1.00	1.02	1.04	
	O	1.00	1.02	1.05	1.08	1.11	1.13	1.16	1.18	1.20	1.00	1.02	1.05	1.08	1.10	1.13	1.15	1.17	1.19	1.00	0.99	0.98	1.00	1.01	1.04	1.06	1.08		
	P	1.00	1.02	1.05	1.08	1.11	1.13	1.16	1.18	1.20	1.00	1.02	1.05	1.08	1.10	1.13	1.15	1.17	1.19	1.00	0.99	0.98	1.00	1.01	1.04	1.06	1.08		
	Q	1.00	1.02	1.05	1.08																								

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
CY	A	1.00	1.01	1.03	1.05	1.08	1.09	1.11	1.12	1.13	1.00	1.01	1.03	1.05	1.05	1.07	1.08	1.10	1.11	1.00	0.98	0.93	0.94	0.93	0.95	0.96	0.98	0.98	0.99		
	B	1.00	1.01	1.02	1.05	1.07	1.09	1.10	1.12	1.13	1.00	1.01	1.02	1.05	1.01	1.02	1.03	1.04	1.00	0.95	0.86	0.88	0.83	0.85	0.86	0.87	0.88				
	C	1.00	1.03	1.06	1.09	1.11	1.13	1.14	1.16	1.17	1.00	1.03	1.06	1.09	1.05	1.07	1.09	1.10	1.11	1.00	0.99	0.93	0.94	0.92	0.93	0.95	0.96	0.97			
	D	1.00	1.01	1.03	1.06	1.08	1.10	1.12	1.13	1.14	1.00	1.01	1.03	1.06	1.00	1.02	1.03	1.05	1.06	1.00	0.95	0.84	0.93	0.88	0.90	0.91	0.92	0.93			
	E	1.00	1.01	1.04	1.06	1.09	1.11	1.12	1.14	1.15	1.00	1.01	1.04	1.06	1.02	1.04	1.05	1.06	1.07	1.00	0.98	0.93	0.94	0.90	0.92	0.93	0.94	0.95			
	F	1.00	1.03	1.05	1.07	1.10	1.12	1.13	1.15	1.16	1.00	1.03	1.05	1.07	1.08	1.10	1.12	1.13	1.14	1.00	0.97	0.91	0.92	0.92	0.94	0.95	0.96	0.97			
	G	1.00	1.05	1.08	1.12	1.14	1.16	1.18	1.20	1.21	1.00	1.05	1.08	1.12	1.13	1.15	1.16	1.18	1.19	1.00	1.00	0.94	0.96	0.96	0.98	0.99	1.01	1.02			
	H	1.00	1.05	1.07	1.10	1.12	1.14	1.16	1.17	1.18	1.00	1.05	1.07	1.10	1.07	1.09	1.11	1.12	1.13	1.00	1.00	0.94	0.94	0.92	0.93	0.95	0.96	0.97			
	I	1.00	1.05	1.06	1.08	1.11	1.13	1.14	1.16	1.17	1.00	1.05	1.06	1.08	1.09	1.11	1.13	1.14	1.15	1.00	1.01	0.97	0.98	0.99	1.01	1.02	1.03	1.04			
	J	1.00	1.03	1.07	1.11	1.13	1.15	1.17	1.18	1.19	1.00	1.03	1.07	1.11	1.13	1.15	1.17	1.18	1.19	1.00	0.98	0.93	0.95	0.96	0.98	0.99	1.01	1.02			
	K	1.00	1.01	1.04	1.08	1.11	1.12	1.14	1.16	1.17	1.00	1.01	1.04	1.08	1.10	1.12	1.14	1.15	1.16	1.00	0.96	0.93	0.94	0.96	0.98	0.99	1.01	1.02			
	L	1.00	1.01	1.03	1.06	1.08	1.10	1.12	1.13	1.14	1.00	1.01	1.03	1.06	1.08	1.10	1.12	1.13	1.14	1.00	0.97	0.93	0.93	0.95	0.97	0.98	0.99	1.00			
	M	1.00	1.02	1.06	1.09	1.12	1.14	1.15	1.17	1.18	1.00	1.02	1.06	1.09	1.11	1.13	1.15	1.16	1.17	1.00	0.97	0.93	0.94	0.95	0.97	0.98	0.99	1.00			
	N	1.00	1.02	1.06	1.09	1.12	1.14	1.15	1.17	1.18	1.00	1.02	1.06	1.09	1.11	1.13	1.15	1.16	1.17	1.00	0.97	0.93	0.94	0.95	0.97	0.98	0.99	1.00			
	O	1.00	1.01	1.04	1.06	1.09	1.11	1.12	1.14	1.15	1.00	1.01	1.04	1.06	1.08	1.10	1.12	1.13	1.14	1.00	0.99	0.95	0.96	0.98	1.00	1.01	1.02	1.03			
	P	1.00	1.01	1.04	1.06	1.09	1.11	1.12	1.14	1.15	1.00	1.01	1.04	1.06	1.08	1.10	1.12	1.13	1.14	1.00	0.99	0.95	0.96	0.98	1.00	1.01	1.02	1.03			
	Q	1.00	1.01	1.04	1.06	1.09	1.11	1.12	1.14	1.15	1.00	1.01	1.04	1.06	1.08	1.10	1.12	1.13	1.14	1.00	0.99	0.95	0.96	0.98	1.00	1.01	1.02	1.03			
	R	1.00	1.05	1.07	1.10	1.13	1.15	1.16	1.18	1.19	1.00	1.05	1.07	1.10	1.11	1.13	1.15	1.16	1.17	1.00	1.02	0.99	1.01	1.01	1.03	1.05	1.06	1.07			
	S	1.00	1.05	1.07	1.10	1.13	1.15	1.16	1.18	1.19	1.00	1.05	1.07	1.10	1.11	1.13	1.15	1.16	1.17	1.00	1.02	0.99	1.01	1.02	1.03	1.05	1.06	1.07			
	T	1.00	1.05	1.07	1.10	1.13	1.15	1.16	1.18	1.19	1.00	1.05	1.07	1.10	1.11	1.13	1.15	1.16	1.17	1.00	1.02	0.99	1.01	1.02	1.03	1.05	1.06	1.07			
	U	1.00	1.05	1.07	1.10	1.13	1.15	1.16	1.18	1.19	1.00	1.05	1.07	1.10	1.11	1.13	1.15	1.16	1.17	1.00	1.02	0.99	1.01	1.02	1.03	1.05	1.06	1.07			
CZ	A	1.00	1.00	1.02	1.03	1.04	1.05	1.06	1.08	1.10	1.00	1.00	1.02	1.03	1.01	1.02	1.04	1.05	1.07	1.00	0.96	0.91	0.92	0.90	0.91	0.93	0.94	0.96			
	B	1.00	1.03	1.05	1.07	1.08	1.09	1.10	1.12	1.14	1.00	1.03	1.05	1.07	0.99	1.01	1.02	1.03	1.05	1.00	0.94	0.80	0.94	0.88	0.89	0.90	0.91	0.93			
	C	1.00	1.02	1.05	1.08	1.08	1.10	1.11	1.13	1.14	1.00	1.02	1.05	1.08	1.05	1.06	1.07	1.09	1.11	1.00	0.97	0.88	0.91	0.89	0.90	0.91	0.92	0.94			
	D	1.00	1.02	1.03	1.05	1.06	1.07	1.09	1.10	1.12	1.00	1.02	1.03	1.05	1.05	1.08	1.09	1.10	1.12	1.00	0.98	0.99	1.00	0.93	0.87	0.88	0.89	0.92			
	E	1.00	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.12	1.00	1.03	1.04	1.06	1.04	1.05	1.09	1.10	1.13	1.00	1.01	1.03	1.04	1.05	1.06	1.07	1.08				
	F	1.00	0.97	0.99	1.00	1.01	1.02	1.04	1.05	1.07	1.00	0.97	0.99	1.00	1.00	1.01	1.02	1.04	1.05	1.00	0.98	0.88	0.87	0.88	0.89	0.90	0.91	0.92			
	G	1.00	0.98	1.01	1.05	1.06	1.07	1.08	1.10	1.12	1.00	0.98	1.01	1.05	1.05	1.06	1.07	1.09	1.11	1.00	0.94	0.91	0.93	0.94	0.95	0.96	0.97	0.98			
	H	1.00	0.99	1.02	1.05	1.07	1.08	1.10	1.12	1.15	1.00	1.02	1.05	1.08	1.09	1.10	1.11	1.15	1.16	1.00	0.98	0.95	0.96	0.97	0.98	0.99	1.01	1.02			
	I	1.00	0.98	1.00	1.01	1.02	1.03	1.05	1.07	1.09	1.00	0.98	1.00	1.02	1.04	1.05	1.06	1.08	1.10	1.00	0.95	0.91	0.93	0.94	0.95	0.96	0.97	0.98			
	J	1.00	1.02	1.05	1.08	1.09	1.10	1.12	1.13	1.15	1.00	1.02	1.05	1.08	1.09	1.10	1.11	1.13	1.15	1.00	0.98	0.95	0.96	0.97	0.98	0.99	1.01	1.02			
	K	1.00	1.01	1.05	1.08	1.09	1.10	1.11	1.13	1.15	1.00	1.01	1.05	1.08	1.09	1.10	1.11	1.13	1.15	1.00	0.97	0.96	0.98	0.99	0.99	1.01	1.02	1.04			
	L	1.00	1.00	1.02	1.02	1.03	1.04	1.04	1.06	1.08	1.00	1.01	1.02	1.03	1.02	1.03	1.04	1.06	1.07	1.00	0.95	0.96	0.97	0.98	0.99	0.99	1.01	1.02			
	M	1.00	0.98	0.99	1.01	1.01	1.02	1.02	1.03	1.04	1.00	0.98	0.99	1.01	1.01	1.02	1.03	1.03	1.04	1.00	0.93	0.89	0.89	0.89	0.90	0.90	0.91	0.92			
	N	1.00	0.98	0.99	1.01	1.01	1.02	1.02	1.03	1.04	1.00	0.98	0.99	1.01	1.01	1.02	1.02	1.03	1.04	1.00	0.93	0.89	0.89	0.89	0.90	0.90	0.91	0.92			
	O	1.00	1.01	1.03	1.04	1.04	1.05	1.05	1.06	1.07	1.00	1.01	1.03	1.04	1.04	1.05	1.06	1.07	1.08	1.00	0.99	0.99	1.01	1.01	1.02	1.02	1.03				
	P	1.00	1.01	1.03	1.04	1.04	1.05	1.06	1.06	1.07	1.00	1.01	1.03	1.04	1.04	1.05	1.06	1.07	1.08	1.00	0.99	0.99	1.01	1.01	1.02	1.02	1.03				
	Q	1.00	1.01	1.03	1.04	1.04	1.05	1.05	1.06	1.07	1.00	1.01	1.03	1.04	1.04	1.05	1.06	1.07	1.08	1.00	0.99	0.99	1.01	1.01	1.02	1.02	1.03				
	R	1.00	1.03	1.04	1.04	1.05	1.05	1.06	1.06	1.07	1.00	1.03	1.04	1																	

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
DK	A	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.02	1.04	1.05	1.04	1.05	1.06	1.08	1.10	1.00	0.96	0.91	0.90	0.89	0.90	0.91	0.93	0.93	0.94		
	B	1.00	1.02	1.02	1.02	1.03	1.04	1.06	1.07	1.09	1.00	1.02	1.02	1.02	0.95	0.97	0.98	0.99	1.01	1.00	0.92	0.82	0.86	0.81	0.82	0.83	0.84	0.85	0.85		
	C	1.00	1.03	1.05	1.06	1.08	1.09	1.10	1.12	1.14	1.00	1.03	1.05	1.06	1.04	1.05	1.07	1.08	1.10	1.00	0.96	0.91	0.92	0.90	0.91	0.93	0.94	0.95	0.95		
	D	1.00	1.01	1.02	1.03	1.04	1.05	1.07	1.09	1.10	1.00	1.01	1.02	1.03	0.97	0.98	0.99	1.00	1.02	1.00	0.91	0.80	0.89	0.83	0.84	0.86	0.87	0.88	0.88		
	E	1.00	1.01	1.02	1.02	1.03	1.05	1.06	1.07	1.09	1.00	1.01	1.02	1.02	0.96	0.98	0.99	1.00	1.02	1.00	0.97	0.94	0.94	0.89	0.90	0.91	0.92	0.94	0.94		
	F	1.00	1.02	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.02	1.03	1.05	1.05	1.06	1.08	1.09	1.11	1.00	0.97	0.94	0.95	0.95	0.96	0.97	0.99	0.99	1.00		
	G	1.00	1.01	1.03	1.06	1.07	1.08	1.10	1.11	1.13	1.00	1.01	1.03	1.06	1.06	1.07	1.09	1.10	1.12	1.00	0.95	0.90	0.90	0.92	0.93	0.94	0.96	0.96	0.96		
	H	1.00	1.03	1.04	1.05	1.06	1.07	1.09	1.10	1.12	1.00	1.03	1.04	1.05	1.00	1.01	1.03	1.04	1.06	1.00	0.95	0.89	0.88	0.84	0.85	0.86	0.88	0.89	0.89		
	I	1.00	1.03	1.04	1.06	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.06	1.06	1.07	1.08	1.10	1.12	1.00	0.97	0.92	0.91	0.90	0.92	0.93	0.94	0.96	0.96		
	J	1.00	1.03	1.05	1.06	1.08	1.09	1.10	1.12	1.14	1.00	1.03	1.05	1.06	1.07	1.09	1.10	1.12	1.14	1.00	0.97	0.93	0.94	0.95	0.96	0.97	0.98	0.98	1.00		
	K	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	0.96	0.93	0.95	0.96	0.97	0.98	1.00	1.01	1.01		
	L	1.00	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.00	1.00	1.01	1.03	1.04	1.05	1.06	1.08	1.10	1.00	0.97	0.94	0.96	0.97	0.98	1.00	1.01	1.03	1.03		
	M	1.00	1.03	1.05	1.07	1.08	1.09	1.11	1.13	1.14	1.00	1.03	1.05	1.07	1.07	1.08	1.10	1.11	1.13	1.00	0.97	0.92	0.92	0.93	0.94	0.96	0.97	0.97	0.97		
	N	1.00	1.03	1.05	1.07	1.08	1.09	1.11	1.13	1.14	1.00	1.03	1.05	1.07	1.07	1.09	1.10	1.12	1.13	1.00	0.97	0.92	0.92	0.93	0.94	0.95	0.96	0.96	0.98		
	O	1.00	1.00	1.01	1.02	1.04	1.05	1.06	1.08	1.10	1.00	1.00	1.02	1.02	1.03	1.04	1.05	1.07	1.09	1.00	0.96	0.93	0.93	0.94	0.95	0.96	0.98	0.98	0.99		
	P	1.00	1.00	1.01	1.02	1.02	1.04	1.05	1.06	1.08	1.00	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.00	0.96	0.93	0.93	0.94	0.95	0.96	0.98	0.98	0.99	
	Q	1.00	1.00	1.01	1.02	1.04	1.05	1.06	1.08	1.10	1.00	1.01	1.02	1.03	1.04	1.05	1.07	1.08	1.09	1.00	0.96	0.93	0.93	0.94	0.95	0.96	0.97	0.97	0.99		
	R	1.00	1.04	1.05	1.06	1.07	1.09	1.10	1.12	1.13	1.00	1.04	1.05	1.06	1.06	1.07	1.09	1.10	1.11	1.00	0.95	0.95	0.96	0.97	0.98	0.98	1.00	1.00	1.00		
	S	1.00	1.04	1.05	1.06	1.08	1.09	1.11	1.12	1.13	1.00	1.04	1.05	1.06	1.06	1.08	1.09	1.10	1.12	1.00	0.95	0.95	0.95	0.96	0.97	0.99	0.99	1.00	1.00		
	T	1.00	1.04	1.05	1.06	1.07	1.09	1.10	1.12	1.13	1.00	1.04	1.05	1.06	1.07	1.08	1.10	1.11	1.12	1.00	0.95	0.98	0.99	1.00	1.01	1.02	1.04	1.05	1.05		
	U	1.00	1.04	1.05	1.06	1.07	1.09	1.10	1.12	1.13	1.00	1.04	1.05	1.06	1.07	1.08	1.09	1.11	1.13	1.00	0.95	0.95	0.96	0.97	0.98	1.00	1.01	1.01	1.01		
Euro Area	A	1.00	1.01	1.02	1.03	1.05	1.06	1.07	1.09	1.10	1.00	1.01	1.02	1.03	1.02	1.03	1.05	1.06	1.07	1.00	0.96	0.91	0.92	0.93	0.94	0.95	0.96	0.96	0.96		
	B	1.00	0.98	0.99	0.99	1.01	1.02	1.04	1.05	1.06	1.00	0.98	0.99	0.99	0.95	0.95	0.96	0.97	0.98	1.00	0.90	0.78	0.86	0.81	0.82	0.83	0.84	0.85	0.85		
	C	1.00	1.02	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.02	1.03	1.05	1.03	1.04	1.06	1.07	1.08	1.00	0.94	0.86	0.88	0.87	0.88	0.89	0.90	0.91	0.91		
	D	1.00	0.98	0.99	1.00	1.02	1.03	1.04	1.06	1.07	1.00	0.98	0.99	1.00	0.94	0.95	0.97	0.98	0.99	1.00	0.86	0.66	0.91	0.85	0.86	0.88	0.89	0.90	0.90		
	E	1.00	0.98	0.99	1.01	1.02	1.03	1.05	1.06	1.07	1.00	0.98	0.99	1.01	0.95	0.97	0.98	0.99	1.00	1.00	0.94	0.86	0.87	0.89	0.90	0.91	0.91	0.91	0.91		
	F	1.00	0.99	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.00	0.99	1.00	1.01	1.01	1.03	1.04	1.05	1.06	1.00	0.96	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.98		
	G	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.01	1.03	1.05	1.05	1.07	1.08	1.09	1.10	1.00	0.97	0.93	0.94	0.94	0.95	0.96	0.97	0.98	0.99		
	H	1.00	1.03	1.04	1.06	1.07	1.09	1.10	1.11	1.12	1.00	1.03	1.04	1.06	1.04	1.06	1.07	1.08	1.09	1.00	0.97	0.91	0.92	0.88	0.89	0.90	0.91	0.92	0.92		
	I	1.00	1.05	1.06	1.07	1.09	1.10	1.11	1.12	1.13	1.00	1.05	1.06	1.07	1.05	1.06	1.07	1.08	1.10	1.00	0.96	0.96	0.96	0.97	0.97	0.99	1.00	1.01	1.01		
	J	1.00	1.02	1.04	1.05	1.07	1.09	1.10	1.11	1.13	1.00	1.02	1.04	1.05	1.06	1.07	1.09	1.10	1.12	1.00	0.98	0.95	0.96	0.97	0.98	0.99	1.00	1.02	1.02		
	K	1.00	1.00	1.01	1.03	1.04	1.06	1.07	1.08	1.09	1.00	1.01	1.03	1.04	1.06	1.06	1.07	1.08	1.09	1.00	0.97	0.94	0.95	0.95	0.97	0.98	0.99	1.00	1.00		
	L	1.00	1.00	1.01	1.03	1.04	1.06	1.07	1.08	1.09	1.00	1.01	1.03	1.04	1.06	1.06	1.07	1.08	1.09	1.00	0.98	0.95	0.96	0.97	0.98	0.99	1.00	1.01	1.02		
	M	1.00	1.05	1.08	1.13	1.15	1.17	1.19	1.20	1.22	1.00	1.05	1.08	1.13	1.14	1.16	1.17	1.19	1.21	1.00	1.04	0.99	0.99	0.99	1.01	1.02	1.04	1.06	1.06		
	N	1.00	1.05	1.08	1.13	1.15	1.17	1.19	1.20	1.22	1.00	1.05	1.08	1.13	1.14	1.16	1.18	1.19	1.21	1.00	1.01	0.99	0.99	1.00	1.01	1.03	1.04	1.06	1.06		
	O	1.00	1.00	1.02	1.05	1.07	1.08	1.10	1.12	1.13	1.00	1.00	1.02	1.05	1.06	1.08	1.09	1.13	1.00	1.01	1.03	1.04	1.05	1.06	1.08	1.08	1.08				
	P	1.00	1.00	1.02	1.05	1.07	1.08	1.10	1.12	1.13	1.00	1.00	1.02	1.05	1.06	1.08	1.09	1.11	1.13	1.00	1.01	0.99	0.99	1.00	1.01	1.03	1.04	1.06	1.06		
	Q	1.00	1.00																												

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
ES	A	1.00	1.01	1.03	1.05	1.07	1.09	1.11	1.13	1.14	1.00	1.01	1.03	1.05	1.04	1.07	1.08	1.10	1.12	1.00	0.96	0.93	0.93	0.93	0.94	0.96	0.97	0.97	0.99		
	B	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.00	1.02	1.04	1.06	1.00	1.02	1.04	1.06	1.07	1.00	0.95	0.88	0.87	0.82	0.84	0.85	0.87	0.88			
	C	1.00	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.17	1.00	1.04	1.06	1.08	1.06	1.08	1.10	1.12	1.13	1.00	0.94	0.82	0.78	0.77	0.78	0.79	0.81	0.82			
	D	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.04	1.06	1.00	1.02	1.04	1.05	1.07	1.00	0.93	0.89	0.92	0.87	0.89	0.90	0.92	0.93			
	E	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.16	1.00	1.02	1.04	1.06	1.02	1.04	1.06	1.07	1.09	1.00	0.97	0.94	0.94	0.90	0.91	0.93	0.94	0.96			
	F	1.00	1.02	1.03	1.04	1.06	1.09	1.10	1.12	1.14	1.00	1.02	1.03	1.04	1.05	1.07	1.09	1.11	1.12	1.00	0.98	0.94	0.94	0.95	0.96	0.98	1.00	1.01			
	G	1.00	1.03	1.07	1.09	1.12	1.14	1.16	1.18	1.19	1.00	1.03	1.07	1.09	1.11	1.13	1.15	1.16	1.18	1.00	0.99	0.97	0.98	0.99	1.01	1.02	1.04	1.05			
	H	1.00	1.05	1.07	1.08	1.10	1.13	1.15	1.16	1.18	1.00	1.05	1.07	1.08	1.04	1.06	1.08	1.10	1.11	1.00	0.98	0.91	0.89	0.85	0.87	0.89	0.90	0.91			
	I	1.00	1.05	1.07	1.09	1.11	1.13	1.15	1.17	1.19	1.00	1.05	1.07	1.09	1.10	1.12	1.14	1.15	1.17	1.00	1.00	0.98	0.99	0.99	1.01	1.03	1.05	1.06			
	J	1.00	1.03	1.06	1.08	1.10	1.13	1.15	1.16	1.18	1.00	1.03	1.06	1.08	1.10	1.12	1.14	1.16	1.18	1.00	0.99	0.96	0.97	0.99	1.01	1.02	1.04	1.05			
	K	1.00	1.01	1.03	1.05	1.07	1.10	1.11	1.13	1.15	1.00	1.01	1.03	1.05	1.07	1.09	1.11	1.13	1.15	1.00	0.97	0.96	0.96	0.98	1.00	1.01	1.03	1.04			
	L	1.00	0.99	1.01	1.04	1.06	1.08	1.10	1.12	1.13	1.00	0.99	1.01	1.04	1.06	1.08	1.10	1.11	1.13	1.00	0.96	0.96	0.97	0.99	1.01	1.03	1.04	1.06			
	M	1.00	1.03	1.06	1.09	1.12	1.14	1.16	1.17	1.19	1.00	1.03	1.06	1.09	1.10	1.13	1.14	1.16	1.18	1.00	0.98	0.97	0.97	0.98	1.00	1.02	1.04	1.05			
	N	1.00	1.03	1.06	1.09	1.12	1.14	1.16	1.17	1.19	1.00	1.03	1.06	1.09	1.11	1.13	1.15	1.17	1.18	1.00	0.98	0.97	0.97	0.98	1.00	1.02	1.04	1.05			
	O	1.00	1.00	1.02	1.03	1.06	1.08	1.11	1.13	1.15	1.00	1.00	1.02	1.03	1.05	1.07	1.09	1.11	1.12	1.00	0.98	0.97	0.97	0.99	1.01	1.02	1.04	1.05			
	P	1.00	1.00	1.02	1.03	1.06	1.08	1.10	1.11	1.13	1.00	1.00	1.02	1.03	1.05	1.07	1.09	1.11	1.12	1.00	0.96	0.95	0.95	0.97	1.00	1.02	1.04	1.03			
	Q	1.00	1.00	1.02	1.04	1.05	1.07	1.08	1.10	1.12	1.00	1.00	1.02	1.04	1.05	1.07	1.08	1.10	1.11	1.00	0.95	0.95	0.97	0.98	1.00	1.02	1.03	1.03			
	R	1.00	1.09	1.12	1.14	1.17	1.19	1.21	1.23	1.25	1.00	1.09	1.12	1.14	1.15	1.17	1.19	1.21	1.23	1.00	1.06	1.06	1.06	1.08	1.10	1.12	1.14				
	S	1.00	1.09	1.12	1.14	1.17	1.19	1.21	1.23	1.25	1.00	1.09	1.12	1.14	1.15	1.17	1.19	1.21	1.23	1.00	1.06	1.06	1.06	1.08	1.10	1.12	1.14				
	T	1.00	1.09	1.12	1.14	1.17	1.19	1.21	1.23	1.25	1.00	1.09	1.12	1.14	1.15	1.17	1.18	1.20	1.22	1.00	1.06	1.06	1.06	1.07	1.09	1.11	1.12	1.14			
	U	1.00	1.09	1.12	1.14	1.17	1.19	1.21	1.23	1.25	1.00	1.09	1.12	1.14	1.15	1.17	1.18	1.20	1.22	1.00	1.06	1.06	1.06	1.07	1.10	1.11	1.13	1.15			
EU	A	1.00	1.01	1.02	1.03	1.05	1.06	1.08	1.09	1.10	1.00	1.01	1.02	1.03	1.02	1.04	1.05	1.06	1.07	1.00	1.06	1.05	1.06	1.07	1.10	1.11	1.13	1.15			
	B	1.00	0.98	0.99	1.00	1.02	1.03	1.04	1.05	1.07	1.00	0.98	0.99	1.00	0.94	0.95	0.96	0.98	0.99	1.00	0.96	0.91	0.92	0.91	0.93	0.94	0.95	0.96	0.96		
	C	1.00	1.02	1.04	1.05	1.07	1.08	1.10	1.11	1.12	1.00	1.02	1.04	1.05	1.03	1.05	1.06	1.07	1.09	1.00	0.90	0.79	0.86	0.81	0.82	0.83	0.84	0.85			
	D	1.00	0.98	0.99	1.01	1.02	1.04	1.05	1.06	1.07	1.00	0.98	0.99	1.01	0.95	0.96	0.97	0.98	0.99	1.00	0.95	0.86	0.89	0.87	0.88	0.89	0.91	0.92			
	E	1.00	0.98	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.00	0.98	1.00	1.01	0.96	0.97	0.98	0.99	1.00	1.01	0.98	0.86	0.86	0.86	0.87	0.89	0.89	0.90			
	F	1.00	1.00	1.01	1.02	1.03	1.05	1.06	1.07	1.08	1.00	1.00	1.01	1.02	1.01	1.02	1.03	1.05	1.06	1.00	0.94	0.90	0.91	0.92	0.94	0.95	0.96	0.97			
	G	1.00	1.01	1.02	1.04	1.05	1.07	1.08	1.09	1.10	1.00	1.01	1.03	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.96	0.92	0.93	0.93	0.94	0.96	0.97	0.98			
	H	1.00	1.03	1.04	1.06	1.07	1.09	1.10	1.11	1.13	1.00	1.03	1.04	1.06	1.04	1.06	1.07	1.09	1.10	1.00	0.97	0.91	0.92	0.88	0.89	0.90	0.91	0.92			
	I	1.00	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.15	1.00	1.05	1.06	1.07	1.05	1.06	1.07	1.09	1.10	1.00	0.97	0.91	0.92	0.88	0.89	0.90	0.91	0.92			
	J	1.00	1.02	1.04	1.06	1.08	1.09	1.11	1.12	1.13	1.00	1.02	1.04	1.06	1.04	1.06	1.07	1.08	1.09	1.00	0.96	0.96	0.96	0.97	0.97	0.99	1.00	1.01			
	K	1.00	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.10	1.00	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.10	1.00	0.98	0.95	0.96	0.97	0.98	0.99	1.00	1.02			
	L	1.00	0.98	0.99	1.00	1.01	1.02	1.03	1.04	1.05	1.00	0.98	0.99	1.01	1.00	1.00	1.01	1.02	1.03	1.00	0.96	0.92	0.93	0.94	0.94	0.95	0.96	0.96			
	M	1.00	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.00	1.02	1.04	1.05	1.04	1.04	1.05	1.06	1.07	1.00	0.96	0.95	0.96	0.97	0.98	0.99	1.00	1.02			
	N	1.00	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.00	1.02	1.04	1.05	1.04	1.05	1.06	1.07	1.08	1.00	0.97	0.94	0.95	0.95	0.96	0.97	0.98	0.98			
	O	1.00	0.99	0.99	1.01	1.01	1.02	1.03	1.04	1.04	1.00	0.99	0.99	1.01	1.00	1.01	1.02	1.03	1.00	0.97	0.94	0.95	0.96	0.96	0.97	0.98	0.98				
	P	1.00	0.99	0.99	1.01	1.01	1.01	1.02	1.03	1.04	1.00	0.99	0.99	1.01	1.00	1.01	1.02	1.03	1.00	0.97	0.93	0.94	0.94	0.95	0.95	0.96	0.97				
	Q	1.00	0.99	0.99	1.01	1.01	1.01	1.02	1.02	1.03	1.00	0.99	0.99	1.01	1.00	1.01	1.02	1.03	1.00	0.97	0.93	0.94	0.94	0.95	0.95</						

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
FR	A	1.00	1.01	1.01	1.03	1.04	1.06	1.07	1.08	1.10	1.00	1.01	1.01	1.03	1.02	1.03	1.04	1.06	1.07	1.00	1.00	0.97	0.98	0.98	0.99	1.00	1.00	1.00	1.00		
	B	1.00	0.94	0.94	0.94	0.96	0.97	0.98	1.00	1.01	1.00	0.94	0.94	0.94	0.88	0.90	0.91	0.92	0.93	1.00	0.96	0.91	0.92	0.91	0.92	0.93	0.95	0.96	0.96		
	C	1.00	1.02	1.03	1.04	1.06	1.08	1.09	1.10	1.12	1.00	1.02	1.03	1.04	1.02	1.04	1.05	1.07	1.08	1.00	0.89	0.82	0.81	0.76	0.77	0.78	0.79	0.80	0.80		
	D	1.00	0.94	0.94	0.95	0.96	0.98	0.99	1.00	1.01	1.00	0.94	0.94	0.95	0.89	0.90	0.92	0.93	0.94	1.00	0.95	0.86	0.87	0.85	0.86	0.87	0.89	0.90	0.90		
	E	1.00	0.95	0.95	0.96	0.98	0.99	1.01	1.02	1.03	1.00	0.95	0.95	0.96	0.92	0.93	0.94	0.95	0.97	1.00	0.84	0.64	0.86	0.81	0.82	0.83	0.84	0.85	0.85		
	F	1.00	1.01	1.01	1.02	1.04	1.05	1.07	1.08	1.09	1.00	1.01	1.02	1.02	1.04	1.05	1.06	1.08	1.00	1.00	0.91	0.88	0.89	0.84	0.86	0.87	0.88	0.89	0.89		
	G	1.00	1.01	1.02	1.04	1.05	1.07	1.08	1.10	1.11	1.00	1.01	1.02	1.04	1.05	1.06	1.08	1.09	1.10	1.00	0.98	0.95	0.96	0.96	0.98	0.99	1.00	1.01	1.01		
	H	1.00	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	1.00	1.02	1.03	1.05	1.06	1.00	0.97	0.93	0.94	0.95	0.96	0.98	0.99	1.00	1.00		
	I	1.00	1.05	1.05	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.05	1.05	1.05	1.05	1.06	1.06	1.08	1.09	1.11	1.00	0.97	0.91	0.87	0.88	0.89	0.90	0.91	0.91		
	J	1.00	1.03	1.04	1.06	1.08	1.10	1.11	1.13	1.14	1.00	1.03	1.04	1.06	1.00	1.03	1.04	1.08	1.09	1.11	1.00	1.01	0.96	0.95	0.95	0.96	0.97	0.99	0.99	1.00	
	K	1.00	1.01	1.03	1.05	1.06	1.08	1.10	1.11	1.12	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	0.99	0.97	0.97	0.99	1.00	1.01	1.03	1.04	1.04		
	L	1.00	0.99	1.00	1.02	1.03	1.05	1.06	1.07	1.09	1.00	0.99	1.00	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.00	0.98	0.96	0.97	1.00	1.01	1.03	1.04	1.04		
	M	1.00	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.10	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.09	1.00	0.97	0.95	0.95	0.96	0.98	0.99	1.00	1.02	1.02			
	N	1.00	1.00	1.01	1.03	1.05	1.05	1.07	1.08	1.09	1.00	1.01	1.03	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.00	0.96	0.92	0.92	0.94	0.95	0.96	0.97	0.97	0.97	
	O	1.00	1.00	1.01	1.02	1.02	1.04	1.05	1.07	1.08	1.00	1.00	1.02	1.02	1.03	1.05	1.06	1.08	1.09	1.00	0.96	0.92	0.92	0.94	0.95	0.96	0.97	0.97	0.97		
	P	1.00	1.00	1.01	1.02	1.02	1.04	1.04	1.07	1.08	1.00	1.00	1.02	1.02	1.03	1.05	1.05	1.08	1.09	1.00	0.99	0.97	0.97	0.98	1.00	1.01	1.03	1.04	1.04		
	Q	1.00	1.00	1.01	1.02	1.02	1.04	1.05	1.07	1.08	1.00	1.00	1.03	1.03	1.05	1.07	1.08	1.09	1.11	1.00	0.98	0.97	0.97	0.98	1.00	1.01	1.03	1.04	1.04		
	R	1.00	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	1.05	1.07	1.08	1.09	1.11	1.00	0.98	0.97	0.97	0.98	1.00	1.01	1.02	1.04	1.04		
	S	1.00	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	1.05	1.07	1.08	1.09	1.11	1.00	0.98	0.98	0.98	0.99	1.00	1.01	1.02	1.03	1.03		
	T	1.00	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	1.05	1.07	1.08	1.09	1.11	1.00	0.98	0.98	0.98	0.99	1.00	1.01	1.02	1.04	1.04		
	U	1.00	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.13	1.00	1.03	1.04	1.05	1.06	1.08	1.09	1.11	1.12	1.00	0.98	0.98	0.98	0.99	1.00	1.01	1.03	1.04	1.04		
GR	A	1.00	1.01	1.03	1.05	1.06	1.08	1.10	1.11	1.13	1.00	1.01	1.03	1.05	1.05	1.07	1.09	1.10	1.11	1.00	1.01	0.98	0.98	0.99	0.99	1.00	1.01	1.03	1.04	1.04	
	B	1.00	1.03	1.04	1.06	1.09	1.11	1.13	1.14	1.15	1.00	1.03	1.04	1.06	1.06	1.08	1.10	1.11	1.12	1.00	0.95	0.87	0.86	0.81	0.84	0.85	0.86	0.87	0.87		
	C	1.00	1.02	1.05	1.08	1.10	1.12	1.14	1.15	1.16	1.00	1.02	1.05	1.08	1.06	1.08	1.10	1.11	1.12	1.00	0.95	0.87	0.86	0.81	0.84	0.85	0.86	0.86	0.86		
	D	1.00	1.03	1.07	1.10	1.12	1.15	1.16	1.18	1.18	1.00	1.03	1.07	1.10	1.04	1.06	1.08	1.09	1.10	1.00	0.93	0.79	0.78	0.77	0.79	0.80	0.81	0.82	0.82		
	E	1.00	1.03	1.04	1.06	1.09	1.11	1.13	1.14	1.15	1.00	1.03	1.04	1.06	1.06	1.07	1.07	1.08	1.09	1.00	0.98	0.88	0.92	0.87	0.89	0.90	0.91	0.92	0.92		
	F	1.00	1.03	1.06	1.09	1.11	1.14	1.15	1.17	1.18	1.00	1.03	1.06	1.09	1.06	1.09	1.10	1.14	1.15	1.00	0.99	0.94	0.94	0.91	0.92	0.94	0.95	0.95	0.95		
	G	1.00	1.03	1.06	1.09	1.11	1.14	1.15	1.17	1.18	1.00	1.03	1.06	1.09	1.06	1.09	1.10	1.14	1.15	1.00	0.99	0.93	0.93	0.95	0.96	0.98	0.99	1.00	1.00		
	H	1.00	1.04	1.07	1.10	1.12	1.15	1.16	1.18	1.19	1.00	1.04	1.07	1.10	1.10	1.07	1.09	1.10	1.12	1.00	0.98	0.94	0.94	0.96	0.96	0.98	0.99	1.00	1.01		
	I	1.00	1.03	1.06	1.09	1.12	1.14	1.16	1.17	1.18	1.00	1.03	1.06	1.09	1.06	1.09	1.11	1.15	1.16	1.00	0.97	0.90	0.90	0.88	0.89	0.91	0.92	0.93	0.93		
	J	1.00	1.04	1.07	1.10	1.13	1.15	1.17	1.18	1.19	1.00	1.04	1.07	1.10	1.10	1.07	1.11	1.13	1.15	1.00	0.96	0.90	0.90	0.88	0.89	0.91	0.92	0.93	0.93		
	K	1.00	1.05	1.09	1.12	1.14	1.17	1.18	1.20	1.20	1.00	1.05	1.09	1.12	1.12	1.05	1.12	1.14	1.15	1.00	0.96	0.97	0.97	0.99	1.01	1.03	1.05	1.05	1.05		
	L	1.00	1.04	1.06	1.08	1.12	1.15	1.17	1.18	1.20	1.00	1.04	1.06	1.08	1.06	1.09	1.12	1.14	1.15	1.00	0.97	0.91	0.91	0.92	0.94	0.95	0.96	0.97	0.97		
	M	1.00	1.04	1.08	1.11	1.15	1.18	1.21	1.24	1.24	1.00	1.04	1.08	1.11	1.14	1.17	1.20	1.22	1.23	1.00	0.98	0.94	0.94	0.97	1.00	1.02	1.04	1.05	1.05		
	N	1.00	1.04	1.08	1.11	1.15	1.18	1.21	1.24	1.24	1.00	1.04	1.08	1.11	1.14	1.17	1.20	1.22	1.23	1.00	0.98	0.94	0.95	0.97	1.00	1.02	1.04	1.05	1.05		
	O	1.00	1.03	1.05	1.07	1.11	1.14	1.17	1.19	1.20	1.00	1.03	1.05	1.07	1.10	1.14	1.16	1.18	1.19	1.00	0.98	0.94	0.95	0.97	1.00	1.03	1.04	1.06	1.06		
	P	1.00	1.03	1.05	1.07	1.11	1.14	1.17	1.19	1.20	1.00	1.03	1.05	1.07	1.10	1.14	1.16	1.18	1.20	1.00	0.98	0.96	0.97	0.99	1.02	1.05	1.06	1.08	1.08		

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
HU	A	1.00	0.85	0.86	0.88	0.90	0.93	0.95	0.97	0.99	1.00	0.85	0.86	0.88	0.88	0.90	0.93	0.95	0.97	1.00	0.99	0.96	0.97	1.00	1.02	1.05	1.07	1.08			
	B	1.00	1.03	1.05	1.08	1.11	1.13	1.16	1.19	1.22	1.00	1.03	1.05	1.08	1.02	1.05	1.07	1.10	1.13	1.00	0.82	0.77	0.79	0.81	0.83	0.85	0.87				
	C	1.00	1.02	1.04	1.07	1.10	1.13	1.15	1.18	1.21	1.00	1.02	1.04	1.07	1.06	1.09	1.12	1.14	1.17	1.00	0.97	0.85	0.90	0.86	0.88	0.90	0.92	0.94			
	D	1.00	1.02	1.03	1.05	1.07	1.10	1.13	1.15	1.18	1.00	1.02	1.03	1.05	0.99	1.02	1.04	1.07	1.09	1.00	0.95	0.84	0.90	0.89	0.91	0.94	0.96	0.98			
	E	1.00	1.03	1.05	1.07	1.10	1.13	1.15	1.18	1.21	1.00	1.03	1.05	1.07	1.03	1.05	1.08	1.11	1.13	1.00	0.86	0.65	0.94	0.89	0.92	0.94	0.96	0.98			
	F	1.00	0.98	1.01	1.04	1.07	1.10	1.12	1.15	1.17	1.00	0.98	1.01	1.04	1.05	1.08	1.11	1.13	1.16	1.00	0.96	1.00	0.96	0.98	1.00	1.03	1.05				
	G	1.00	0.97	1.00	1.05	1.07	1.10	1.12	1.15	1.18	1.00	0.97	1.00	1.05	1.06	1.09	1.11	1.14	1.17	1.00	0.94	0.89	0.92	0.93	0.95	0.97	0.99	1.02			
	H	1.00	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.18	1.00	1.00	1.02	1.05	1.02	1.04	1.06	1.09	1.12	1.00	0.94	0.92	0.97	0.98	1.01	1.03	1.05	1.08			
	I	1.00	1.00	1.01	1.04	1.06	1.09	1.12	1.14	1.17	1.00	1.00	1.01	1.04	1.05	1.08	1.10	1.13	1.15	1.00	0.94	0.86	0.90	0.87	0.89	0.91	0.93	0.96			
	J	1.00	1.01	1.04	1.07	1.10	1.13	1.15	1.18	1.21	1.00	1.01	1.04	1.07	1.10	1.12	1.15	1.18	1.21	1.00	0.97	0.93	0.96	0.97	0.99	1.02	1.04	1.07			
	K	1.00	0.99	1.01	1.03	1.06	1.08	1.11	1.14	1.16	1.00	0.99	1.01	1.03	1.06	1.08	1.11	1.13	1.16	1.00	0.98	0.94	0.95	0.98	1.00	1.02	1.05	1.07			
	L	1.00	0.98	1.00	1.03	1.05	1.08	1.11	1.13	1.16	1.00	0.98	1.00	1.03	1.05	1.08	1.10	1.13	1.15	1.00	0.97	0.95	0.96	0.99	1.01	1.03	1.06	1.08			
	M	1.00	0.99	1.03	1.08	1.11	1.13	1.15	1.19	1.22	1.00	0.99	1.03	1.08	1.10	1.12	1.15	1.18	1.20	1.00	0.96	0.92	0.93	0.95	0.97	0.99	1.02				
	N	1.00	0.99	1.03	1.08	1.11	1.13	1.16	1.19	1.22	1.00	0.99	1.03	1.08	1.10	1.13	1.15	1.18	1.21	1.00	0.95	0.90	0.92	0.93	0.95	0.98	1.00	1.02			
	O	1.00	0.99	1.00	1.03	1.06	1.08	1.11	1.13	1.16	1.00	0.99	1.00	1.03	1.05	1.07	1.10	1.13	1.15	1.00	0.95	0.90	0.92	0.93	0.96	0.98	1.00	1.03			
	P	1.00	0.99	1.00	1.03	1.06	1.08	1.11	1.13	1.16	1.00	0.99	1.00	1.03	1.05	1.07	1.10	1.13	1.15	1.00	0.98	0.98	0.99	1.02	1.03	1.06	1.14				
	Q	1.00	0.99	1.00	1.03	1.06	1.08	1.11	1.13	1.16	1.00	0.99	1.00	1.03	1.05	1.07	1.10	1.12	1.15	1.00	0.98	0.98	0.99	1.02	1.03	1.06	1.14				
	R	1.00	0.99	1.01	1.04	1.06	1.09	1.12	1.14	1.17	1.00	0.99	1.01	1.04	1.05	1.08	1.10	1.13	1.15	1.00	0.98	0.95	0.98	0.99	1.02	1.04	1.06	1.09			
	S	1.00	0.99	1.01	1.04	1.06	1.09	1.12	1.14	1.17	1.00	0.99	1.01	1.04	1.05	1.08	1.10	1.13	1.15	1.00	0.98	0.95	0.98	0.99	1.01	1.04	1.06	1.09			
	T	1.00	0.99	1.01	1.04	1.06	1.09	1.12	1.14	1.17	1.00	0.99	1.01	1.04	1.05	1.08	1.10	1.13	1.16	1.00	0.98	0.95	0.98	0.99	1.02	1.04	1.06	1.09			
	U	1.00	0.99	1.01	1.04	1.06	1.09	1.12	1.14	1.17	1.00	0.99	1.01	1.04	1.05	1.08	1.11	1.13	1.16	1.00	0.98	0.95	0.98	1.00	1.02	1.04	1.07	1.09			
IE	A	1.00	1.11	1.16	1.21	1.28	1.34	1.39	1.44	1.47	1.00	0.99	1.01	1.04	1.06	1.08	1.11	1.14	1.16	1.00	0.98	0.95	0.98	1.00	1.02	1.05	1.07	1.10			
	B	1.00	0.69	0.73	0.77	0.81	0.85	0.89	0.91	0.94	1.00	1.11	1.16	1.21	1.25	1.31	1.36	1.41	1.44	1.00	1.04	1.02	1.04	1.07	1.12	1.17	1.21	1.23			
	C	1.00	1.12	1.18	1.24	1.31	1.38	1.43	1.48	1.51	1.00	0.69	0.73	0.77	0.75	0.79	0.82	0.85	0.87	1.00	0.63	0.59	0.62	0.60	0.63	0.66	0.68	0.70			
	D	1.00	0.69	0.72	0.76	0.80	0.84	0.87	0.90	0.92	1.00	1.12	1.18	1.24	1.26	1.33	1.38	1.43	1.46	1.00	1.04	0.99	1.01	1.03	1.08	1.13	1.16	1.19			
	E	1.00	0.69	0.72	0.76	0.80	0.84	0.87	0.90	0.92	1.00	0.69	0.72	0.76	0.74	0.78	0.81	0.83	0.85	1.00	0.62	0.55	0.63	0.62	0.65	0.67	0.69	0.71			
	F	1.00	1.06	1.11	1.16	1.22	1.28	1.34	1.38	1.41	1.00	0.69	0.72	0.76	0.75	0.79	0.82	0.84	0.86	1.00	0.65	0.63	0.64	0.63	0.67	0.69	0.71				
	G	1.00	1.05	1.10	1.15	1.22	1.28	1.33	1.37	1.40	1.00	1.06	1.11	1.16	1.21	1.27	1.32	1.36	1.39	1.00	0.99	0.96	0.97	1.01	1.06	1.10	1.14	1.16			
	H	1.00	1.06	1.11	1.17	1.23	1.29	1.34	1.39	1.42	1.00	1.05	1.10	1.15	1.20	1.26	1.32	1.36	1.39	1.00	0.97	0.92	0.91	0.95	1.00	1.04	1.08	1.10			
	I	1.00	1.05	1.10	1.15	1.21	1.27	1.32	1.37	1.40	1.00	1.06	1.11	1.17	1.18	1.24	1.29	1.33	1.36	1.00	0.97	0.92	0.92	0.97	1.01	1.04	1.07				
	J	1.00	1.04	1.11	1.17	1.23	1.29	1.35	1.39	1.42	1.00	1.05	1.10	1.15	1.19	1.25	1.31	1.35	1.38	1.00	0.97	0.91	0.90	0.93	1.02	1.05	1.08				
	K	1.00	1.02	1.07	1.12	1.18	1.24	1.29	1.33	1.36	1.00	1.04	1.11	1.17	1.23	1.29	1.34	1.39	1.42	1.00	0.98	0.97	0.99	1.04	1.10	1.14	1.21				
	L	1.00	1.05	1.10	1.15	1.22	1.28	1.33	1.37	1.40	1.00	1.05	1.10	1.15	1.20	1.26	1.32	1.36	1.39	1.00	0.97	0.92	0.90	0.94	1.00	1.06	1.08				
	M	1.00	1.05	1.10	1.15	1.21	1.27	1.32	1.37	1.40	1.00	1.05	1.10	1.15	1.20	1.27	1.32	1.36	1.39	1.00	0.97	0.91	0.90	0.94	1.00	1.06	1.08				
	N	1.00	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.00	1.01	1.02	1.04	1.04	1.05	1.07	1.08	1.09	1.00	0.97	0.92	0.92	0.93	0.94	0.95	0.95	0.95			
	O	1.00	1.01	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.00	1.01	1.02	1.04	1.04	1.06	1.07	1.08	1.09	1.00	0.97	0.92	0.92	0.94	0.95	0.96	0.96				
	P	1.00	1.01	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.08	1.09	1.00	0.98	0.95	0.95	0.96	0.97	0.98	0.99	0.99			
	Q	1.00	1.01	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.07	1.00	0.98	0.95	0.95	0.96	0.97	0.98	0.99	0.99			
	R	1.00	1.02	1.03	1.04	1.05	1.07	1.08	1.08	1.09	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.00											

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Country	NACE code	B										A1										A2										
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030				
LT	A	1.00	1.02	1.04	1.06	1.07	1.09	1.10	1.10	1.11	1.00	1.02	1.03	1.04	1.05	1.06	1.07	1.08	1.00	0.99	0.95	0.97	0.98	0.99	1.00	1.00	1.01	1.01	1.01			
	B	1.00	0.99	1.01	1.04	1.05	1.06	1.07	1.08	1.09	1.00	1.02	1.04	1.06	1.04	1.05	1.06	1.07	1.08	1.00	1.02	0.99	0.98	0.96	0.97	0.98	0.99	1.00	1.00	1.01	1.01	
	C	1.00	0.99	1.02	1.05	1.06	1.08	1.09	1.10	1.10	1.00	0.99	1.01	1.04	0.97	0.98	0.99	1.00	1.01	1.00	0.98	0.92	0.92	0.86	0.87	0.88	0.89	0.89	0.89	0.89	0.89	0.89
	D	1.00	0.98	1.00	1.03	1.04	1.05	1.06	1.07	1.08	1.00	0.99	1.02	1.05	1.03	1.04	1.05	1.06	1.07	1.00	0.98	0.94	0.93	0.91	0.92	0.93	0.94	0.94	0.94	0.94	0.94	
	E	1.00	0.99	1.01	1.03	1.04	1.06	1.07	1.08	1.08	1.00	0.98	1.00	1.03	0.96	0.97	0.98	0.99	1.00	1.00	0.98	0.93	0.96	0.89	0.90	0.91	0.92	0.93	0.93	0.93	0.93	0.93
	F	1.00	0.97	1.00	1.04	1.05	1.06	1.07	1.08	1.08	1.00	0.99	1.01	1.03	0.98	0.99	1.00	1.01	1.01	1.00	0.98	0.96	0.96	0.91	0.92	0.93	0.94	0.94	0.94	0.94	0.94	0.94
	G	1.00	0.97	1.00	1.04	1.05	1.06	1.07	1.08	1.08	1.00	0.97	1.00	1.04	1.01	1.02	1.03	1.04	1.00	0.96	0.92	0.90	0.88	0.89	0.90	0.90	0.91	0.91	0.91	0.91	0.91	
	H	1.00	0.98	1.01	1.04	1.05	1.07	1.08	1.09	1.09	1.00	0.97	1.00	1.04	1.04	1.05	1.06	1.07	1.00	0.97	0.95	0.95	0.96	0.97	0.98	0.99	0.99	0.99	0.99	0.99	0.99	
	I	1.00	0.98	1.00	1.03	1.04	1.05	1.06	1.07	1.07	1.00	0.98	1.01	1.04	1.01	1.01	1.02	1.03	1.00	0.97	0.93	0.92	0.88	0.89	0.90	0.90	0.91	0.91	0.91	0.91	0.91	
	J	1.00	1.02	1.05	1.08	1.10	1.12	1.12	1.13	1.00	0.98	1.00	1.03	1.02	1.04	1.05	1.06	1.06	1.00	0.98	0.97	0.98	0.97	0.98	0.99	1.00	1.00	1.01	1.01	1.01		
	K	1.00	0.96	0.99	1.03	1.04	1.05	1.06	1.07	1.08	1.00	1.02	1.05	1.08	1.09	1.10	1.11	1.12	1.13	1.00	1.01	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
	L	1.00	0.97	0.99	1.02	1.03	1.04	1.05	1.06	1.06	1.00	0.96	0.99	1.03	1.04	1.05	1.06	1.06	1.07	1.08	1.00	0.96	0.95	0.96	0.97	0.98	0.99	0.99	0.99	0.99	0.99	
	M	1.00	0.99	1.02	1.06	1.07	1.09	1.10	1.11	1.11	1.00	0.97	0.99	1.02	1.02	1.03	1.04	1.05	1.06	1.00	0.97	0.94	0.94	0.95	0.96	0.97	0.98	0.98	0.98	0.98	0.98	
	N	1.00	0.99	1.02	1.06	1.07	1.09	1.10	1.11	1.11	1.00	0.99	1.02	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.98	0.96	0.96	0.97	0.98	0.99	0.99	0.99	0.99	0.99		
	O	1.00	0.98	0.99	1.02	1.03	1.04	1.05	1.06	1.07	1.00	0.99	1.02	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.98	0.96	0.96	0.97	0.98	0.99	0.99	0.99	0.99	0.99		
	P	1.00	0.98	0.99	1.02	1.03	1.04	1.05	1.06	1.07	1.00	0.98	1.01	1.04	1.02	1.03	1.04	1.05	1.06	1.00	0.98	0.97	0.98	0.97	0.98	0.99	0.99	0.99	0.99	0.99		
	Q	1.00	0.98	1.00	1.02	1.03	1.04	1.05	1.06	1.07	1.00	0.98	1.01	1.03	1.04	1.05	1.06	1.07	1.08	1.00	0.98	0.97	0.98	0.97	0.98	0.99	0.99	0.99	0.99	0.99		
	R	1.00	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.09	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.99	0.99	0.99	1.00	1.01	1.01	1.02	1.02	1.02	1.02		
	S	1.00	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.09	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.99	0.99	0.99	1.00	1.01	1.01	1.02	1.02	1.02	1.02		
	T	1.00	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.09	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.99	0.99	0.99	1.00	1.01	1.01	1.02	1.02	1.02	1.02		
	U	1.00	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.09	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.99	0.99	0.99	1.00	1.01	1.01	1.02	1.02	1.02	1.02		
LU	A	1.00	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.09	1.00	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.00	1.00	0.99	0.99	1.00	1.01	1.02	1.03	1.03	1.03	1.03	1.03	1.03	
	B	1.00	1.01	1.02	1.04	1.05	1.06	1.08	1.09	1.10	1.00	1.01	1.03	1.04	1.05	1.06	1.07	1.08	1.00	1.00	0.94	0.87	0.85	0.84	0.85	0.86	0.87	0.88	0.88	0.88	0.88	
	C	1.00	1.02	1.05	1.07	1.08	1.09	1.11	1.12	1.13	1.00	1.01	1.02	1.04	0.97	0.98	1.00	1.01	1.02	1.00	0.95	0.89	0.87	0.82	0.83	0.84	0.85	0.86	0.86	0.86	0.86	
	D	1.00	1.02	1.05	1.07	1.09	1.10	1.11	1.13	1.14	1.00	1.02	1.05	1.07	1.04	1.05	1.06	1.07	1.08	1.09	1.00	0.96	0.89	0.89	0.87	0.88	0.89	0.90	0.91	0.91	0.91	
	E	1.00	1.02	1.05	1.08	1.09	1.11	1.12	1.13	1.15	1.00	1.02	1.05	1.07	1.01	1.02	1.03	1.04	1.05	1.06	1.00	0.92	0.84	0.96	0.91	0.92	0.93	0.94	0.94	0.94	0.94	
	F	1.00	1.00	1.02	1.05	1.06	1.08	1.09	1.10	1.11	1.00	1.01	1.02	1.05	1.03	1.04	1.05	1.06	1.07	1.08	1.00	0.98	0.93	0.94	0.91	0.92	0.93	0.94	0.94	0.94	0.94	
	G	1.00	1.01	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.00	1.02	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.00	0.96	0.91	0.90	0.90	0.91	0.92	0.93	0.93	0.93	0.93		
	H	1.00	1.02	1.05	1.07	1.08	1.10	1.12	1.14	1.15	1.00	1.01	1.02	1.04	1.03	1.05	1.06	1.07	1.08	1.09	1.00	0.97	0.93	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.98	
	I	1.00	1.02	1.06	1.10	1.11	1.13	1.16	1.18	1.22	1.00	1.02	1.05	1.08	1.05	1.06	1.09	1.11	1.12	1.13	1.00	0.97	0.92	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.98	
	J	1.00	1.04	1.08	1.12	1.14	1.16	1.18	1.21	1.24	1.00	1.02	1.06	1.10	1.06	1.10	1.12	1.14	1.17	1.20	1.00	0.98	0.93	0.97	1.00	1.01	1.02	1.04	1.05	1.06	1.07	
	K	1.00	1.04	1.08	1.12	1.13	1.15	1.18	1.20	1.24	1.00	1.04	1.08	1.11	1.13	1.15	1.17	1.20	1.23	1.00	0.99	0.99	1.02	1.03	1.05	1.07	1.09	1.12	1.12	1.12		
	L	1.00	1.04	1.08	1.11	1.13	1.15	1.17	1.20	1.23	1.00	1.04	1.08	1.12	1.13	1.15	1.18	1.20	1.24	1.00	1.00	0.99	1.02	1.03	1.05	1.07	1.09	1.12	1.12	1.12		
	M	1.00	1.05	1.07	1.12	1.15	1.17	1.20	1.24	1.00	1.04	1.08	1.11	1.13	1.15	1.17	1.20	1.23	1.00	0.99	0.99	1.02	1.03	1.05	1.07	1.09	1.12	1.12	1.12			
	N	1.00	1.03	1.07	1.12	1.13	1.15	1.17	1.20	1.24	1.00	1.03	1.07	1.12	1.14	1.16	1.19	1.22	1.00	0.98	0.96	0.99	1.01	1.03	1.05	1.08	1.10	1.12	1.12			
	O	1.00	1.02	1.04	1.07	1.09	1.11																									

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
MT	A	1.00	1.24	1.29	1.34	1.37	1.39	1.41	1.43	1.44	1.00	1.06	1.09	1.12	1.13	1.15	1.18	1.20	1.24	1.00	1.01	1.00	1.04	1.05	1.07	1.09	1.12	1.15			
	B	1.00	1.00	1.04	1.08	1.10	1.12	1.13	1.15	1.16	1.00	1.24	1.29	1.34	1.33	1.36	1.38	1.39	1.41	1.00	1.18	1.13	1.15	1.17	1.18	1.20	1.21				
	C	1.00	1.07	1.10	1.14	1.16	1.18	1.20	1.22	1.23	1.00	1.00	1.04	1.08	1.02	1.03	1.05	1.06	1.07	1.00	0.95	0.85	0.90	0.85	0.87	0.88	0.89	0.90			
	D	1.00	1.00	1.04	1.08	1.10	1.12	1.14	1.15	1.16	1.00	1.07	1.10	1.14	1.08	1.10	1.11	1.13	1.14	1.00	1.01	0.94	0.93	0.88	0.90	0.91	0.92	0.93			
	E	1.00	1.00	1.04	1.08	1.10	1.12	1.14	1.15	1.16	1.00	1.00	1.04	1.08	1.02	1.04	1.05	1.07	1.08	1.00	0.89	0.63	0.90	0.85	0.86	0.87	0.89	0.89			
	F	1.00	1.01	1.05	1.08	1.10	1.12	1.13	1.15	1.16	1.00	1.00	1.04	1.08	1.04	1.06	1.08	1.09	1.10	1.00	0.96	0.91	0.92	0.89	0.91	0.92	0.93	0.94			
	G	1.00	1.09	1.12	1.14	1.17	1.19	1.21	1.22	1.23	1.00	1.01	1.05	1.08	1.09	1.11	1.12	1.14	1.15	1.00	0.98	0.92	0.92	0.93	0.95	0.96	0.97	0.98			
	H	1.00	1.10	1.14	1.19	1.21	1.23	1.25	1.27	1.28	1.00	1.09	1.12	1.14	1.16	1.18	1.20	1.21	1.22	1.00	1.03	0.96	0.94	0.96	0.97	0.99	1.00	1.01			
	I	1.00	1.09	1.11	1.14	1.16	1.19	1.20	1.22	1.23	1.00	1.10	1.14	1.19	1.16	1.18	1.20	1.22	1.23	1.00	1.03	0.94	0.96	0.97	0.98	0.99	0.98	0.99			
	J	1.00	1.03	1.07	1.12	1.14	1.16	1.18	1.19	1.20	1.00	1.09	1.11	1.14	1.15	1.17	1.19	1.21	1.22	1.00	1.04	0.98	0.97	0.98	1.00	1.01	1.03	1.03			
	K	1.00	1.01	1.06	1.11	1.13	1.15	1.17	1.18	1.19	1.00	1.03	1.07	1.12	1.14	1.16	1.18	1.19	1.20	1.00	0.98	0.93	0.93	0.94	0.96	0.97	0.99	1.00			
	L	1.00	1.06	1.09	1.13	1.15	1.17	1.19	1.20	1.21	1.00	1.01	1.06	1.11	1.13	1.15	1.17	1.18	1.19	1.00	0.96	0.91	0.91	0.93	0.95	0.96	0.97	0.98			
	M	1.00	1.07	1.11	1.15	1.18	1.20	1.22	1.23	1.24	1.00	1.06	1.09	1.13	1.15	1.17	1.19	1.20	1.21	1.00	1.02	0.99	1.01	1.02	1.04	1.06	1.07	1.08			
	N	1.00	1.07	1.11	1.15	1.18	1.20	1.22	1.23	1.24	1.00	1.07	1.11	1.15	1.17	1.19	1.20	1.22	1.23	1.00	1.01	0.95	0.96	0.97	0.98	0.99	1.00	1.00			
	O	1.00	1.03	1.06	1.10	1.12	1.14	1.16	1.17	1.18	1.00	1.07	1.11	1.15	1.17	1.19	1.21	1.22	1.23	1.00	1.01	0.95	0.94	0.95	0.97	0.98	1.00	1.01			
	P	1.00	1.03	1.06	1.10	1.12	1.14	1.16	1.17	1.18	1.00	1.03	1.06	1.10	1.11	1.13	1.15	1.16	1.17	1.00	0.96	0.96	0.96	0.96	0.97	0.98	0.99	1.01			
	Q	1.00	1.03	1.06	1.10	1.12	1.14	1.17	1.18	1.19	1.00	1.03	1.06	1.10	1.11	1.13	1.15	1.16	1.17	1.00	0.96	0.96	0.96	0.96	0.97	0.98	0.99	1.01			
	R	1.00	1.03	1.08	1.13	1.15	1.17	1.19	1.20	1.21	1.00	1.03	1.06	1.10	1.11	1.13	1.15	1.16	1.17	1.00	0.96	0.96	0.97	0.98	1.00	1.01	1.03	1.03			
	S	1.00	1.03	1.08	1.13	1.15	1.17	1.19	1.20	1.21	1.00	1.03	1.06	1.10	1.11	1.13	1.15	1.16	1.17	1.00	0.98	0.99	0.99	0.99	1.01	1.03	1.04	1.05			
	T	1.00	1.03	1.08	1.13	1.15	1.17	1.19	1.20	1.21	1.00	1.03	1.06	1.10	1.11	1.13	1.15	1.16	1.17	1.00	0.98	0.99	0.99	0.99	1.00	1.01	1.03	1.04			
	U	1.00	1.03	1.08	1.13	1.15	1.17	1.19	1.20	1.21	1.00	1.03	1.08	1.13	1.14	1.16	1.18	1.19	1.20	1.00	0.98	0.99	0.99	0.99	1.00	1.02	1.03	1.04			
NL	A	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.00	1.03	1.08	1.13	1.14	1.17	1.18	1.20	1.21	1.00	1.00	0.98	0.99	1.00	1.02	1.04	1.05	1.06			
	B	1.00	1.00	1.00	1.01	1.02	1.04	1.05	1.06	1.08	1.00	1.01	1.03	1.04	1.02	1.04	1.05	1.06	1.07	1.00	0.98	0.94	0.93	0.91	0.93	0.94	0.95	0.96			
	C	1.00	1.01	1.03	1.04	1.05	1.07	1.08	1.10	1.11	1.00	1.00	1.01	1.05	0.95	0.96	0.97	0.98	0.99	1.00	0.94	0.84	0.87	0.82	0.83	0.84	0.85	0.86			
	D	1.00	1.01	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.00	1.01	1.03	1.04	1.01	1.03	1.04	1.05	1.07	1.00	0.96	0.90	0.90	0.88	0.89	0.90	0.91	0.92			
	E	1.00	1.02	1.03	1.05	1.06	1.08	1.09	1.10	1.12	1.00	1.01	1.03	1.05	0.98	1.00	1.01	1.02	1.03	1.00	0.97	0.89	0.96	0.90	0.92	0.93	0.94	0.95			
	F	1.00	1.00	1.01	1.01	1.03	1.04	1.06	1.07	1.08	1.00	1.02	1.03	1.05	0.99	1.00	1.02	1.03	1.04	1.00	0.98	0.93	0.93	0.93	0.94	0.95	0.96	0.97			
	G	1.00	1.00	1.02	1.04	1.05	1.07	1.08	1.10	1.11	1.00	1.00	1.01	1.01	1.02	1.03	1.05	1.06	1.07	1.00	0.97	0.93	0.94	0.94	0.96	0.97	0.98	0.99			
	H	1.00	1.02	1.03	1.04	1.06	1.08	1.09	1.10	1.12	1.00	1.00	1.02	1.04	1.02	1.04	1.05	1.07	1.08	1.00	0.97	0.94	0.94	0.94	0.95	0.96	0.97	0.98			
	I	1.00	1.10	1.07	1.04	1.05	1.07	1.08	1.10	1.11	1.00	1.02	1.03	1.04	1.01	1.02	1.04	1.05	1.06	1.00	0.98	0.92	0.91	0.88	0.90	0.91	0.92	0.93			
	J	1.00	1.03	1.05	1.06	1.08	1.10	1.11	1.12	1.14	1.00	1.10	1.11	1.12	1.07	1.10	1.11	1.12	1.13	1.00	0.96	0.98	0.94	0.95	0.96	0.97	0.98	1.00			
	K	1.00	0.97	0.98	0.99	1.01	1.02	1.04	1.05	1.06	1.00	1.03	1.05	1.06	1.08	1.09	1.11	1.12	1.13	1.00	0.99	0.95	0.95	0.97	0.98	0.99	1.00	1.02			
	L	1.00	1.01	1.02	1.03	1.05	1.06	1.08	1.10	1.11	1.00	1.01	1.02	1.03	1.04	1.05	1.07	1.08	1.09	1.00	0.99	0.99	1.01	1.01	1.03	1.04	1.05				
	M	1.00	1.01	1.02	1.03	1.05	1.06	1.08	1.11	1.13	1.00	1.01	1.05	1.08	1.10	1.13	1.15	1.17	1.18	1.00	0.98	0.95	0.96	0.98	1.00	1.02	1.04	1.04			
	N	1.00	1.01	1.06	1.11	1.13	1.16	1.18	1.21	1.24	1.00	1.01	1.05	1.08	1.11	1.12	1.15	1.17	1.20	1.00	0.99	0.98	1.00	1.03	1.05	1.07	1.09				
	O	1.00	1.02	1.06	1.09	1.12	1.14	1.16	1.19	1.22	1.00	1.01	1.06	1.11	1.13	1.15	1.18	1.20	1.23	1.00	0.99	0.99	1.01	1.03	1.05	1.07	1.10				
	P	1.00	1.02	1.06	1.09	1.12	1.14	1.16	1.19	1.22	1.00	1.02	1.06	1.09	1.11	1.13	1.16	1.18	1.21	1.00	1.00	1.02	1.04	1.06	1.08	1.11	1.13				
	Q	1.00	1.02	1.06	1.09	1.12	1.14	1.16	1.19	1.22	1.00	1.02	1.06	1.09	1.11	1.13	1.16	1.18	1.21	1.00	1.00	1.02	1.04	1.06	1.08	1.11	1.13				

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
PT	A	1.00	1.00	1.02	1.03	1.06	1.08	1.10	1.11	1.12	1.00	1.20	1.23	1.27	1.29	1.32	1.35	1.37	1.40	1.00	1.17	1.15	1.18	1.20	1.23	1.26	1.28	1.31			
	B	1.00	1.01	1.02	1.04	1.06	1.08	1.10	1.11	1.13	1.00	1.00	1.02	1.03	1.03	1.05	1.07	1.08	1.10	1.00	0.96	0.92	0.91	0.91	0.93	0.94	0.96	0.97			
	C	1.00	1.03	1.06	1.08	1.11	1.13	1.15	1.16	1.17	1.00	1.01	1.02	1.04	0.98	1.00	1.02	1.03	1.04	1.00	0.95	0.89	0.87	0.82	0.84	0.85	0.86	0.87			
	D	1.00	1.01	1.03	1.05	1.08	1.10	1.12	1.13	1.14	1.00	1.03	1.06	1.08	1.07	1.10	1.11	1.13	1.14	1.00	0.98	0.94	0.93	0.92	0.94	0.95	0.97	0.98			
	E	1.00	1.01	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.01	1.03	1.05	1.00	1.02	1.03	1.05	1.06	1.00	0.96	0.89	0.93	0.88	0.89	0.91	0.92	0.93			
	F	1.00	0.99	1.01	1.03	1.05	1.07	1.09	1.10	1.12	1.00	1.01	1.04	1.06	1.01	1.03	1.05	1.06	1.08	1.00	0.97	0.94	0.94	0.90	0.92	0.93	0.94	0.96			
	G	1.00	1.04	1.08	1.11	1.13	1.15	1.17	1.19	1.20	1.00	0.99	1.01	1.03	1.04	1.06	1.07	1.09	1.10	1.00	0.96	0.93	0.91	0.92	0.94	0.95	0.97	0.98			
	H	1.00	1.05	1.08	1.10	1.13	1.15	1.17	1.18	1.20	1.00	1.04	1.08	1.11	1.12	1.14	1.16	1.18	1.19	1.00	0.97	0.96	0.98	1.00	1.01	1.03	1.04				
	I	1.00	1.05	1.07	1.08	1.11	1.13	1.15	1.16	1.18	1.00	1.05	1.08	1.10	1.06	1.08	1.10	1.12	1.13	1.00	0.99	0.95	0.93	0.90	0.91	0.93	0.94	0.95			
	J	1.00	1.03	1.05	1.08	1.10	1.13	1.14	1.16	1.17	1.00	1.05	1.07	1.08	1.09	1.11	1.13	1.15	1.16	1.00	1.01	0.98	0.97	0.98	1.00	1.02	1.03	1.04			
	K	1.00	1.02	1.05	1.09	1.11	1.13	1.15	1.17	1.18	1.00	1.03	1.05	1.08	1.10	1.12	1.14	1.16	1.17	1.00	0.98	0.95	0.94	0.96	0.98	1.00	1.01	1.02			
	L	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.05	1.09	1.11	1.13	1.15	1.16	1.18	1.00	0.98	0.96	0.97	0.99	1.01	1.02	1.05				
	M	1.00	1.02	1.05	1.08	1.11	1.13	1.15	1.16	1.17	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	0.98	0.96	0.97	0.99	1.01	1.04	1.05				
	N	1.00	1.02	1.05	1.08	1.11	1.13	1.15	1.16	1.17	1.00	1.02	1.05	1.08	1.09	1.11	1.13	1.15	1.16	1.00	0.97	0.94	0.93	0.92	0.94	0.96	0.98	0.99			
	O	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.14	1.16	1.00	1.02	1.05	1.08	1.10	1.12	1.14	1.15	1.17	1.00	0.97	0.94	0.93	0.95	0.97	0.98	1.00				
	P	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.14	1.16	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	0.99	0.96	0.96	0.98	1.00	1.01	1.03				
	Q	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.13	1.00	0.99	0.96	0.95	0.97	0.98	1.00	1.01	1.04			
	R	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.13	1.15	1.00	0.99	0.96	0.97	0.99	1.01	1.02	1.04				
	S	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.13	1.00	0.98	0.96	0.96	0.97	0.99	1.00	1.02	1.03			
	T	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.14	1.00	0.98	0.96	0.96	0.97	0.99	1.01	1.02	1.03			
	U	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.15	1.00	1.02	1.04	1.06	1.07	1.09	1.11	1.13	1.14	1.00	0.98	0.96	0.96	0.97	0.99	1.01	1.02	1.03			
RO	A	1.00	1.01	1.03	1.02	1.05	1.07	1.10	1.13	1.15	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.13	1.15	1.00	0.98	0.96	0.96	0.98	1.00	1.01	1.03	1.04			
	B	1.00	0.82	0.84	0.84	0.86	0.88	0.90	0.92	0.94	1.00	1.01	1.03	1.02	1.05	1.07	1.10	1.13	1.00	0.97	0.94	0.96	0.96	0.98	1.01	1.03	1.06				
	C	1.00	1.00	1.03	1.04	1.06	1.09	1.11	1.14	1.17	1.00	0.82	0.84	0.84	0.79	0.81	0.83	0.85	0.87	1.00	0.75	0.67	0.78	0.74	0.76	0.78	0.79	0.81			
	D	1.00	0.83	0.85	0.86	0.88	0.90	0.92	0.95	0.97	1.00	1.00	1.03	1.04	1.03	1.05	1.08	1.10	1.13	1.00	0.94	0.88	0.92	0.91	0.94	0.96	0.98	1.01			
	E	1.00	0.83	0.85	0.85	0.87	0.89	0.91	0.94	0.96	1.00	0.83	0.85	0.86	0.81	0.83	0.85	0.88	0.90	1.00	0.73	0.62	0.79	0.75	0.77	0.79	0.81	0.83			
	F	1.00	1.02	1.04	1.04	1.07	1.09	1.12	1.15	1.17	1.00	0.83	0.85	0.85	0.81	0.83	0.85	0.87	0.90	1.00	0.79	0.76	0.79	0.76	0.78	0.79	0.81	0.83			
	G	1.00	1.01	1.06	1.08	1.10	1.13	1.16	1.18	1.21	1.00	1.02	1.04	1.04	1.05	1.08	1.10	1.13	1.16	1.00	0.98	0.93	0.95	0.96	0.98	1.00	1.03	1.05			
	H	1.00	1.01	1.05	1.06	1.09	1.12	1.14	1.17	1.20	1.00	1.01	1.06	1.08	1.09	1.12	1.15	1.17	1.20	1.00	0.97	0.95	0.99	1.01	1.03	1.05	1.08	1.11			
	I	1.00	1.02	1.06	1.07	1.10	1.13	1.15	1.18	1.21	1.00	1.01	1.05	1.06	1.03	1.06	1.08	1.11	1.13	1.00	0.97	0.93	0.96	0.93	0.96	0.98	1.00	1.03			
	J	1.00	1.04	1.08	1.08	1.10	1.13	1.15	1.18	1.21	1.00	1.02	1.05	1.07	1.08	1.11	1.14	1.17	1.19	1.00	0.98	0.96	1.00	1.01	1.06	1.09	1.11				
	K	1.00	1.04	1.06	1.06	1.09	1.12	1.14	1.17	1.20	1.00	1.04	1.08	1.10	1.12	1.15	1.18	1.21	1.24	1.00	0.97	0.97	1.00	1.03	1.05	1.08	1.13				
	L	1.00	1.03	1.06	1.06	1.09	1.11	1.14	1.17	1.20	1.00	1.04	1.06	1.06	1.09	1.11	1.14	1.17	1.20	1.00	0.98	0.99	1.00	1.01	1.05	1.08	1.12				
	M	1.00	1.15	1.20	1.22	1.25	1.28	1.31	1.35	1.38	1.00	1.15	1.20	1.22	1.24	1.27	1.30	1.33	1.37	1.00	1.10	1.07	1.11	1.12	1.15	1.18	1.21	1.24			
	N	1.00	1.01	1.03	1.03	1.05	1.08	1.11	1.16	1.20	1.00	1.05	1.07	1.09	1.03	1.05	1.07	1.10	1.13	1.00	0.98	0.97	1.00	1.02	1.04	1.07	1.12				
	O	1.00	1.01	1.03	1.03	1.05	1.08	1.11	1.16	1.20	1.00	1.01	1.03	1.05	1.07	1.10	1.13	1.15	1.18	1.00	0.98	0.97	1.00	1.02	1.04	1.07	1.12				
	P	1.00	0.96	0.98	0.98	1.01	1.03	1.06	1.08	1.11	1.00	1.01	1.03	1.05	1.07	1.10	1.12	1.15	1.00	0.98	0.97	1.00	1.02	1.04	1.07	1.12					
	Q	1.00	0.96	0.98	0.98	1.01	1.03	1.06	1.08	1.11	1.00	0.96	0.98	0.98	0.99	0.99	1.01	1.04	1.06	1.00	0.99	0.91	0.93	0.94	0.96	0.99	1.01	1.04			
	R	1.00	1.01	1.01	1.02	1.03	1.04	1.05	1.07	1.09	1.00	1.01	1.02	1.04	1.05	1.07	1.09	1.10	1.11	1.00	0.99	0.97	0.98	0.99</td							

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Country	NACE code	B										A1										A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
SI	A	1.00	0.99	1.01	1.03	1.06	1.08	1.10	1.13	1.15	1.00	0.99	1.01	1.03	1.03	1.05	1.07	1.10	1.12	1.00	0.96	0.93	0.94	0.93	0.96	0.98	1.00	1.00	1.01		
	B	1.00	1.00	1.01	1.03	1.05	1.08	1.10	1.12	1.14	1.00	1.00	1.01	1.03	0.97	1.00	1.02	1.04	1.06	1.00	0.96	0.90	0.89	0.85	0.87	0.89	0.90	0.90	0.92		
	C	1.00	1.04	1.06	1.08	1.11	1.13	1.16	1.18	1.20	1.00	1.04	1.06	1.08	1.07	1.10	1.12	1.14	1.16	1.00	0.96	0.94	0.93	0.96	0.98	1.00	1.01				
	D	1.00	0.99	1.01	1.02	1.05	1.07	1.10	1.12	1.14	1.00	0.99	1.01	1.02	0.97	0.99	1.01	1.03	1.05	1.00	0.94	0.85	0.88	0.83	0.85	0.87	0.89	0.90	0.90		
	E	1.00	1.00	1.01	1.03	1.05	1.08	1.10	1.12	1.14	1.00	1.00	1.01	1.03	0.99	1.01	1.03	1.05	1.07	1.00	0.96	0.92	0.90	0.87	0.89	0.90	0.92	0.94			
	F	1.00	1.02	1.05	1.07	1.09	1.12	1.14	1.17	1.19	1.00	1.02	1.05	1.07	1.08	1.11	1.13	1.15	1.17	1.00	0.99	0.95	0.92	0.93	0.95	0.97	0.99	1.01			
	G	1.00	0.94	0.96	0.99	1.01	1.04	1.06	1.08	1.10	1.00	0.94	0.96	0.99	1.01	1.03	1.05	1.07	1.09	1.00	0.91	0.88	0.88	0.90	0.92	0.94	0.95	0.97			
	H	1.00	0.97	0.99	1.02	1.04	1.06	1.09	1.11	1.13	1.00	0.97	0.99	1.02	0.98	1.00	1.02	1.04	1.06	1.00	0.93	0.89	0.89	0.86	0.88	0.90	0.92	0.93			
	I	1.00	0.98	0.99	1.01	1.04	1.06	1.08	1.10	1.12	1.00	0.98	0.99	1.01	1.02	1.05	1.07	1.09	1.11	1.00	0.95	0.93	0.93	0.94	0.97	0.99	1.01	1.02			
	J	1.00	1.04	1.07	1.09	1.12	1.15	1.17	1.19	1.21	1.00	1.04	1.07	1.09	1.12	1.14	1.17	1.19	1.21	1.00	1.01	0.98	0.97	0.99	1.02	1.04	1.06	1.08			
	K	1.00	1.02	1.06	1.09	1.12	1.14	1.17	1.19	1.21	1.00	1.02	1.06	1.09	1.11	1.14	1.16	1.19	1.21	1.00	0.99	0.99	1.00	1.03	1.05	1.07	1.09	1.11			
	L	1.00	0.99	1.01	1.03	1.06	1.08	1.10	1.12	1.14	1.00	0.99	1.01	1.03	1.05	1.08	1.10	1.12	1.14	1.00	0.96	0.94	0.94	0.96	0.99	1.01	1.03	1.05			
	M	1.00	1.00	1.02	1.05	1.07	1.10	1.12	1.14	1.16	1.00	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	0.98	0.97	0.98	1.00	1.03	1.05	1.07	1.09			
	N	1.00	1.00	1.02	1.05	1.07	1.10	1.12	1.14	1.16	1.00	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	0.97	0.95	0.96	0.98	1.00	1.02	1.04	1.06			
	O	1.00	1.00	1.02	1.04	1.07	1.09	1.12	1.14	1.16	1.00	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	0.98	0.97	0.98	1.00	1.03	1.05	1.07	1.09			
	P	1.00	1.00	1.02	1.04	1.07	1.09	1.12	1.14	1.16	1.00	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	0.98	0.97	0.98	1.00	1.03	1.05	1.07	1.09			
	Q	1.00	1.00	1.02	1.04	1.07	1.09	1.12	1.14	1.16	1.00	1.00	1.02	1.04	1.06	1.09	1.11	1.13	1.15	1.00	0.98	0.97	0.98	1.00	1.02	1.05	1.07	1.09			
	R	1.00	1.00	1.02	1.04	1.07	1.09	1.12	1.14	1.16	1.00	1.00	1.02	1.04	1.06	1.09	1.12	1.15	1.18	1.00	1.00	0.98	1.01	1.00	1.02	1.04	1.06	1.09			
	S	1.00	1.03	1.06	1.09	1.10	1.12	1.14	1.17	1.20	1.00	1.03	1.06	1.09	1.09	1.11	1.13	1.15	1.18	1.00	1.00	0.98	1.01	1.01	1.02	1.04	1.06	1.09			
	T	1.00	1.03	1.06	1.09	1.10	1.12	1.14	1.17	1.20	1.00	1.03	1.06	1.09	1.09	1.11	1.13	1.16	1.18	1.00	1.00	0.98	1.01	1.01	1.03	1.05	1.07	1.10			
	U	1.00	1.09	1.10	1.12	1.15	1.18	1.20	1.22	1.00	1.09	1.10	1.12	1.14	1.17	1.19	1.21	1.00	1.06	1.03	1.03	1.05	1.07	1.10	1.12	1.14					
SK	A	1.00	1.03	1.07	1.11	1.12	1.14	1.16	1.19	1.22	1.00	1.03	1.07	1.11	1.09	1.13	1.15	1.18	1.00	0.99	0.96	0.98	0.97	0.98	1.00	1.02	1.05				
	B	1.00	1.02	1.04	1.07	1.09	1.10	1.12	1.15	1.18	1.00	1.02	1.04	1.07	1.00	1.02	1.06	1.09	1.00	0.95	0.88	0.92	0.86	0.88	0.90	0.91	0.94				
	C	1.00	1.05	1.09	1.13	1.14	1.16	1.18	1.21	1.24	1.00	1.05	1.09	1.13	1.10	1.12	1.14	1.17	1.20	1.00	0.96	0.89	0.94	0.92	0.93	0.95	0.97	1.00			
	D	1.00	1.02	1.05	1.08	1.10	1.11	1.13	1.16	1.19	1.00	1.02	1.05	1.08	1.03	1.06	1.09	1.10	1.00	0.85	0.63	0.96	0.90	0.91	0.93	0.95	0.98				
	E	1.00	1.02	1.05	1.08	1.10	1.11	1.13	1.16	1.19	1.00	1.02	1.05	1.08	1.03	1.04	1.06	1.09	1.11	1.00	0.98	0.95	0.97	0.92	0.93	0.95	0.97	1.00			
	F	1.00	1.01	1.03	1.06	1.07	1.09	1.11	1.13	1.16	1.00	1.01	1.03	1.06	1.06	1.07	1.09	1.12	1.15	1.00	0.97	0.92	0.92	0.92	0.93	0.95	0.97	1.00			
	G	1.00	0.99	1.03	1.06	1.07	1.09	1.11	1.13	1.16	1.00	0.99	1.03	1.06	1.06	1.08	1.10	1.13	1.15	1.00	0.94	0.90	0.92	0.94	0.95	0.97	1.00				
	H	1.00	1.01	1.04	1.07	1.08	1.10	1.12	1.14	1.17	1.00	1.01	1.04	1.07	1.02	1.03	1.05	1.08	1.10	1.00	0.95	0.91	0.93	0.89	0.90	0.92	0.94	0.96			
	I	1.00	1.02	1.04	1.07	1.08	1.10	1.12	1.15	1.18	1.00	1.02	1.04	1.07	1.07	1.09	1.11	1.13	1.16	1.00	0.97	0.94	0.96	0.96	0.97	0.99	1.01	1.04			
	J	1.00	1.02	1.06	1.09	1.10	1.12	1.14	1.17	1.20	1.00	1.02	1.06	1.09	1.10	1.12	1.14	1.16	1.19	1.00	0.98	0.95	0.95	0.96	0.98	1.00	1.02	1.04			
	K	1.00	1.01	1.05	1.09	1.10	1.12	1.14	1.16	1.19	1.00	1.01	1.05	1.09	1.10	1.11	1.14	1.16	1.19	1.00	0.97	0.97	0.99	1.00	1.01	1.03	1.06	1.08			
	L	1.00	1.00	1.03	1.06	1.07	1.09	1.11	1.13	1.16	1.00	1.00	1.03	1.06	1.07	1.08	1.10	1.13	1.16	1.00	0.96	0.94	0.95	0.95	0.97	0.99	1.01	1.03			
	M	1.00	1.07	1.11	1.16	1.17	1.19	1.21	1.24	1.27	1.00	1.07	1.11	1.16	1.16	1.18	1.20	1.23	1.26	1.00	1.02	0.99	1.01	1.02	1.03	1.05	1.07	1.10			
	N	1.00	1.07	1.11	1.16	1.17	1.19	1.21	1.24	1.27	1.00	1.07	1.11	1.16	1.16	1.18	1.20	1.23	1.26	1.00	1.02	0.99	1.01	1.02	1.04	1.05	1.08				
	O	1.00	1.00	1.03	1.07	1.08	1.10	1.12	1.14	1.17	1.00	1.00	1.03	1.07	1.07	1.09	1.11	1.13	1.16	1.00	0.98	0.96	0.99	1.00	1.01	1.03	1.05	1.08			
	P	1.00	1.00	1.03	1.07	1.08	1.10	1.12	1.14	1.17	1.00	1.00	1.03	1.07	1.07	1.09	1.11	1.13	1.16	1.00	0.98	0.96	0.99	1.00	1.01	1.03	1.05	1.08			
	Q	1.00	1.00	1.03	1.07	1.08	1.10	1.12	1.14	1.17	1.00	1.00	1.03	1.07	1.07	1.09	1.11	1.13	1.16	1.00	0.98	0.96	0.99	1.01	1.03	1.05	1.08				
	R	1.00	1.03	1.06	1.09	1.10	1.12	1.14	1.17	1.20																					

Table A3. HICP (relative changes %)

Country	HICP annual changes (%)																												
	B							A1							A2														
Country	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030		
AT	8.60	7.40	4.10	2.90	2.68	2.57	2.54	2.56	2.58	8.60	7.40	4.10	2.90	2.58	2.51	2.54	2.55	2.58	8.60	9.23	4.37	3.90	3.03	2.59	2.58	2.62	2.66		
BE	10.30	1.90	4.30	1.80	1.66	1.59	1.58	1.59	1.60	10.30	1.90	4.30	1.80	1.60	1.56	1.58	1.60	10.30	6.97	4.56	2.75	1.98	1.59	1.58	1.62	1.65			
BG	14.30	5.70	3.40	3.00	2.77	2.66	2.63	2.65	2.67	14.30	5.70	3.40	3.00	2.67	2.60	2.63	2.64	2.67	14.30	9.43	5.05	3.88	3.09	2.69	2.68	2.72	2.75		
CY	8.10	3.30	2.30	2.00	1.85	1.77	1.75	1.77	1.78	8.10	3.30	2.30	2.00	1.78	1.73	1.75	1.76	1.78	8.10	5.49	4.28	5.33	2.87	1.64	1.61	1.72	1.83		
CZ	15.10	10.90	2.80	2.30	2.13	2.04	2.02	2.03	2.05	15.10	10.90	2.80	2.30	2.04	1.99	2.02	2.02	2.04	15.10	11.43	5.00	5.89	3.23	1.90	1.87	1.99	2.11		
DE	8.70	6.00	3.10	2.70	2.50	2.39	2.37	2.38	2.40	8.70	6.00	3.10	2.70	2.40	2.34	2.37	2.37	2.40	8.70	9.18	6.56	4.10	2.96	2.39	2.37	2.43	2.48		
DK	8.50	3.80	3.00	2.60	2.40	2.30	2.28	2.30	2.31	8.50	3.80	3.00	2.60	2.31	2.25	2.28	2.28	2.31	8.50	8.88	4.80	4.31	2.96	2.28	2.26	2.32	2.38		
EA	8.40	5.40	3.00	2.20	2.03	1.95	1.93	1.94	1.96	8.40	5.40	3.00	2.20	1.95	1.90	1.93	1.93	1.96	8.40	9.23	5.22	3.70	2.52	1.92	1.91	1.96	2.02		
EE	19.40	9.40	2.30	2.20	2.03	1.95	1.93	1.94	1.96	19.40	9.40	2.30	2.20	1.95	1.90	1.93	1.93	1.96	19.40	13.24	3.89	2.22	2.08	2.01	2.01	2.01	2.02		
ES	8.30	3.20	3.60	1.80	1.66	1.59	1.58	1.59	1.60	8.30	3.20	3.60	1.80	1.60	1.56	1.58	1.58	1.60	8.30	9.59	2.39	1.29	1.55	1.67	1.67	1.66	1.65		
EU	9.20	6.50	3.20	2.20	2.03	1.95	1.93	1.94	1.96	9.20	6.50	3.20	2.20	1.95	1.90	1.93	1.93	1.96	9.20	9.73	5.32	3.76	2.53	1.92	1.91	1.96	2.02		
FI	7.20	4.50	1.30	1.60	1.48	1.42	1.40	1.41	1.42	7.20	4.50	1.30	1.60	1.42	1.38	1.40	1.41	1.42	7.20	6.52	0.81	2.71	1.84	1.40	1.39	1.43	1.47		
FR	5.90	5.60	2.40	1.90	1.76	1.68	1.66	1.68	1.69	5.90	5.60	2.40	1.90	1.69	1.64	1.67	1.67	1.69	5.90	8.58	4.19	3.67	2.31	1.64	1.62	1.68	1.74		
GR	9.30	4.30	3.80	2.30	2.13	2.04	2.02	2.03	2.05	9.30	4.30	3.80	2.30	2.04	1.99	2.02	2.02	2.04	9.30	8.26	4.61	3.24	2.45	2.05	2.04	2.07	2.11		
HR	10.70	7.70	3.90	2.30	2.13	2.04	2.02	2.03	2.05	10.70	7.70	3.90	2.30	2.04	1.99	2.02	2.02	2.04	10.70	9.39	4.96	2.24	2.15	2.10	2.10	2.11	2.11		
HU	15.30	17.80	5.00	3.00	2.77	2.66	2.63	2.65	2.67	15.30	17.80	5.00	3.00	2.67	2.60	2.63	2.64	2.67	15.30	16.94	5.51	4.67	3.32	2.64	2.63	2.69	2.75		
IE	8.10	4.90	3.30	2.20	2.03	1.95	1.93	1.94	1.96	8.10	4.90	3.30	2.20	1.95	1.90	1.93	1.93	1.96	8.10	8.41	7.71	5.32	3.00	1.83	1.81	1.91	2.02		
IT	8.70	6.10	2.30	2.00	1.85	1.77	1.75	1.77	1.78	8.70	6.10	2.30	2.00	1.78	1.73	1.75	1.76	1.78	8.70	12.40	5.65	4.45	2.61	1.69	1.67	1.75	1.83		
LT	18.90	8.90	2.70	2.60	2.40	2.30	2.28	2.30	2.31	18.90	8.90	2.70	2.60	2.31	2.25	2.28	2.28	2.31	18.90	10.39	3.08	3.25	2.64	2.34	2.33	2.36	2.38		
LU	8.20	2.30	2.60	2.50	2.31	2.21	2.19	2.21	2.22	8.20	2.30	2.60	2.50	2.22	2.16	2.19	2.20	2.22	8.20	5.78	5.08	1.71	2.12	2.33	2.33	2.31	2.29		
LV	17.20	8.50	2.40	3.00	2.77	2.66	2.63	2.65	2.67	17.20	8.50	2.40	3.00	2.67	2.60	2.63	2.64	2.67	17.20	13.43	5.46	4.15	3.17	2.67	2.66	2.71	2.75		
MT	6.10	5.30	2.90	2.30	2.13	2.04	2.02	2.03	2.05	6.10	5.30	2.90	2.30	2.04	1.99	2.02	2.02	2.04	6.10	5.44	2.63	0.73	1.70	2.19	2.20	2.15	2.11		
NL	11.60	4.20	3.70	2.50	2.31	2.21	2.19	2.21	2.22	11.60	4.20	3.70	2.50	2.22	2.16	2.19	2.20	2.22	11.60	6.52	6.94	3.73	2.72	2.21	2.20	2.25	2.29		
PL	13.20	11.90	5.20	3.60	3.33	3.19	3.15	3.18	3.20	13.20	11.90	5.20	3.60	3.20	3.12	3.16	3.16	3.20	13.20	17.66	8.19	4.32	3.60	3.25	3.24	3.27	3.30		
PT	8.10	5.20	3.30	2.10	1.94	1.86	1.84	1.85	1.87	8.10	5.20	3.30	2.10	1.87	1.82	1.84	1.84	1.87	8.10	8.30	6.26	5.64	3.03	1.72	1.69	1.81	1.93		
RO	16.40	7.50	4.40	3.80	3.51	3.36	3.33	3.36	3.38	16.40	7.50	4.40	3.80	3.38	3.29	3.33	3.34	3.38	16.40	15.37	8.62	2.35	3.15	3.55	3.56	3.52	3.49		
SE	7.70	5.90	2.50	1.80	1.66	1.59	1.58	1.59	1.60	7.70	5.90	2.50	1.80	1.60	1.56	1.58	1.58	1.60	7.70	8.08	2.47	3.54	2.21	1.55	1.53	1.59	1.65		
SI	9.30	7.50	3.60	2.60	2.40	2.30	2.28	2.30	2.31	9.30	7.50	3.60	2.60	2.31	2.25	2.28	2.28	2.31	9.30	10.46	5.10	2.38	2.38	2.38	2.38	2.38	2.38		
SK	12.10	11.00	6.20	3.70	3.42	3.28	3.24	3.27	3.29	12.10	11.00	6.20	3.70	3.29	3.20	3.25	3.25	3.29	12.10	14.36	8.69	3.70	3.48	3.38	3.37	3.38	3.39		
CA	6.92	3.20	2.13	1.81	1.95	1.99	1.96	1.90	1.89	6.92	3.20	2.13	1.81	1.95	1.99	1.96	1.90	1.89	6.92	6.05	2.26	3.24	3.37	3.41	3.39	3.33	3.31		
CH	3.85	1.60	1.50	1.10	0.66	0.42	0.20	0.01	-0.12	3.85	1.60	1.50	1.10	0.66	0.42	0.20	0.01	-0.12	3.85	5.03	1.55	0.90	0.46	0.21	-0.01	-0.20	-0.32		
JP	2.44	1.15	1.00	0.98	1.28	1.54	1.66	1.69	1.71	2.44	1.15	1.00	0.98	1.28	1.54	1.66	1.69	1.71	2.44	4.36	1.89	1.64	1.94	2.20	2.32	2.35	2.37		
NO	4.70	3.50	2.50	2.13	1.75	1.46	1.19	0.96	4.70	3.50	2.50	2.50	2.13	1.75	1.46	1.19	0.96	4.70	6.95	2.75	2.48	2.12	1.73	1.44	1.17	0.94			
UK	11.33	6.34	1.87	2.00	1.83	1.98	1.92	1.76	1.64	11.33	6.34	1.87	2.00	1.83	1.98	1.92	1.76	1.64	11.33	8.63	2.64	2.84	2.68	2.82	2.76	2.60	2.48		
US	6.39	2.35	2.14	2.01	2.13	2.12	2.08	2.02	1.98	6.39	2.35	2.14	2.01	2.13	2.12	2.08	2.02	1.98	6.39	6.03	2.82	2.86	2.98	2.96	2.93	2.86	2.83		

Table A4. Long-term interest rates (%)

		Long-term interest rates (%)																										
Country		B								A1								A2										
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030
AT		2.74	3.49	3.59	3.69	3.59	3.43	3.29	3.17	3.06	2.74	3.49	3.59	3.69	3.58	3.42	3.29	3.16	3.05	2.74	4.74	4.37	4.28	4.27	4.26	3.46	3.28	3.11
BE		2.70	3.52	3.62	3.72	3.63	3.47	3.32	3.20	3.10	2.70	3.52	3.62	3.72	3.62	3.46	3.32	3.20	3.09	2.70	5.69	4.83	4.65	4.59	4.50	3.54	3.34	3.13
BG		1.85	4.03	4.13	4.23	4.14	3.98	3.83	3.71	3.61	1.85	4.03	4.13	4.23	4.13	3.97	3.83	3.71	3.59	1.85	7.07	6.56	6.62	6.37	5.96	4.37	4.03	3.69
CY		4.20	4.13	4.23	4.33	4.24	4.08	3.93	3.81	3.71	4.20	4.13	4.23	4.33	4.23	4.07	3.93	3.80	3.69	4.20	8.29	6.90	6.45	6.25	5.92	4.42	4.10	3.78
CZ		4.33	4.30	3.90	3.90	3.81	3.65	3.50	3.38	3.28	4.33	4.30	3.90	3.90	3.80	3.64	3.50	3.38	3.26	4.33	9.39	7.26	6.77	6.43	5.87	4.11	3.74	3.36
DE		2.09	2.82	2.92	3.02	2.93	2.77	2.63	2.51	2.40	2.09	2.82	2.92	3.02	2.92	2.76	2.63	2.50	2.39	2.09	4.23	3.77	3.58	3.54	3.47	2.77	2.62	2.47
DK		2.29	3.05	3.15	3.25	3.16	3.00	2.86	2.74	2.63	2.29	3.05	3.15	3.25	3.15	2.99	2.85	2.73	2.62	2.29	4.29	3.83	3.63	3.63	3.63	2.94	2.79	2.64
EA		1.80	3.10	3.20	3.30	3.21	3.05	2.90	2.78	2.68	1.80	3.10	3.20	3.30	3.20	3.04	2.90	2.78	2.67	1.80	5.42	4.75	4.54	4.42	4.20	3.20	2.98	2.77
EE		1.80	3.34	3.40	3.45	3.36	3.20	3.05	2.93	2.82	1.80	3.34	3.40	3.45	3.35	3.19	3.05	2.93	2.81	1.80	3.34	3.40	3.45	3.52	3.63	3.11	2.99	2.88
ES		3.09	3.95	4.05	4.15	4.05	3.90	3.75	3.63	3.52	3.09	3.95	4.05	4.15	4.04	3.88	3.75	3.62	3.51	3.09	7.02	5.79	5.47	5.38	5.23	4.08	3.83	3.58
EU		3.32	3.90	4.00	4.10	4.01	3.85	3.71	3.59	3.48	3.32	3.90	4.00	4.10	4.00	3.84	3.71	3.58	3.47	3.32	5.90	5.17	4.94	4.92	4.89	3.91	3.70	3.49
FI		2.71	3.47	3.57	3.67	3.57	3.42	3.27	3.15	3.04	2.71	3.47	3.57	3.67	3.56	3.40	3.27	3.14	3.03	2.71	4.81	4.43	4.29	4.27	4.25	3.47	3.30	3.13
FR		2.62	3.45	3.55	3.65	3.56	3.40	3.25	3.13	3.03	2.62	3.45	3.55	3.65	3.55	3.39	3.25	3.13	3.02	2.62	4.69	4.30	4.17	4.17	4.17	3.40	3.24	3.07
GR		4.22	4.30	4.40	4.50	4.41	4.25	4.10	3.98	3.88	4.22	4.30	4.40	4.50	4.40	4.24	4.10	3.97	3.86	4.22	8.28	6.89	6.43	6.27	6.00	4.54	4.22	3.91
HR		3.36	4.18	4.28	4.38	4.29	4.13	3.98	3.86	3.76	3.36	4.18	4.28	4.38	4.28	4.12	3.98	3.85	3.74	3.36	7.63	6.24	5.79	5.70	5.55	4.33	4.03	3.81
HU		8.63	7.53	7.63	7.73	7.63	7.47	7.33	7.21	7.10	8.63	7.53	7.63	7.73	7.62	7.46	7.32	7.19	7.08	8.63	12.18	10.54	9.94	9.92	9.89	7.98	7.57	7.16
IE		2.59	3.27	3.37	3.47	3.38	3.22	3.08	2.96	2.85	2.59	3.27	3.37	3.47	3.37	3.21	3.07	2.95	2.84	2.59	4.67	4.28	4.14	4.11	4.06	3.25	3.07	2.90
IT		3.10	4.30	4.50	4.70	4.61	4.45	4.30	4.18	4.08	3.10	4.30	4.50	4.70	4.60	4.44	4.30	4.17	4.06	3.10	7.96	6.77	6.47	6.34	6.13	4.72	4.41	4.11
LT		2.88	2.88	2.98	3.08	2.99	2.83	2.68	2.56	2.46	2.88	2.88	2.98	3.08	2.98	2.82	2.68	2.56	2.45	2.88	7.06	6.10	5.80	5.43	4.83	3.21	2.87	2.52
LU		2.68	3.32	3.42	3.52	3.43	3.27	3.12	3.00	2.89	2.68	3.32	3.42	3.52	3.42	3.26	3.12	3.00	2.88	2.68	4.82	4.34	4.12	4.10	4.07	3.26	3.08	2.91
LV		3.50	4.14	4.24	4.34	4.25	4.09	3.94	3.82	3.72	3.50	4.14	4.24	4.34	4.24	4.08	3.94	3.81	3.70	3.50	6.86	5.91	5.60	5.53	5.42	4.29	4.05	3.81
MT		3.59	4.18	4.28	4.38	4.29	4.13	3.98	3.86	3.76	3.59	4.18	4.28	4.38	4.28	4.12	3.98	3.85	3.74	3.59	6.63	5.68	5.37	5.35	5.30	4.26	4.03	3.81
NL		2.43	3.21	3.31	3.41	3.31	3.16	3.01	2.89	2.78	2.43	3.21	3.31	3.41	3.31	3.15	3.01	2.88	2.77	2.43	4.50	4.05	3.87	3.86	3.86	3.12	2.96	2.80
PL		6.05	6.93	6.95	6.95	6.86	6.70	6.55	6.43	6.33	6.05	6.93	6.95	6.95	6.85	6.68	6.54	6.42	6.30	6.05	11.89	10.51	10.07	9.87	9.53	7.33	6.86	6.39
PT		3.10	3.59	3.69	3.79	3.69	3.54	3.39	3.27	3.16	3.10	3.59	3.69	3.79	3.68	3.52	3.39	3.26	3.15	3.10	6.98	5.73	5.42	5.26	5.00	3.77	3.50	3.24
RO		7.17	6.81	6.91	7.01	6.92	6.76	6.61	6.49	6.39	7.17	6.81	6.91	7.01	6.91	6.74	6.60	6.48	6.36	7.17	13.15	11.34	10.27	10.05	9.69	7.40	6.91	6.42
SE		1.50	2.50	3.10	3.20	3.11	2.95	2.80	2.68	2.58	1.50	2.50	3.10	3.20	3.10	2.94	2.80	2.68	2.57	1.50	4.49	4.30	4.30	4.19	4.00	3.04	2.84	2.63
SI		3.52	3.67	3.77	3.87	3.78	3.62	3.47	3.35	3.25	3.52	3.67	3.77	3.87	3.77	3.61	3.47	3.35	3.23	3.52	6.63	5.94	5.75	5.56	5.24	3.90	3.62	3.33
SK		3.20	4.12	4.22	4.32	4.23	4.07	3.93	3.81	3.70	3.20	4.12	4.22	4.32	4.22	4.06	3.92	3.80	3.69	3.20	5.52	5.04	4.83	4.87	4.94	4.09	3.91	3.73
CA		2.77	4.04	3.65	3.41	3.49	3.55	3.57	3.57	3.53	2.77	4.04	3.65	3.41	3.49	3.55	3.57	3.57	3.53	2.77	6.22	5.40	4.88	4.96	5.02	4.02	3.80	3.59
CH		0.81	1.60	2.00	2.24	2.46	2.65	2.80	2.92	0.81	1.60	2.00	2.24	2.46	2.65	2.80	2.92	0.81	3.78	3.76	3.47	3.71	3.93	3.27	3.13	2.99		
JP		0.22	0.34	0.50	0.67	0.87	1.07	1.25	1.44	1.61	0.22	0.34	0.50	0.67	0.87	1.07	1.25	1.44	1.61	0.22	2.52	2.25	2.14	2.34	2.54	1.95	1.83	1.70
NO		2.86	3.07	3.32	3.07	3.10	3.12	3.14	3.15	3.16	2.86	3.07	3.32	3.07	3.10	3.12	3.14	3.15	3.16	2.86	5.25	5.07	4.54	4.57	4.59	3.60	3.39	3.18
UK		2.38	3.35	3.45	3.59	3.57	3.56	3.57	3.58	3.57	2.38	3.35	3.45	3.59	3.57	3.56	3.57	3.58	3.57	2.38	6.57	5.71	5.56	5.54	4.22	3.94	3.66	
US		2.95	3.63	3.45	3.40	3.37	3.36	3.34	3.32	3.29	2.95	3.63	3.45	3.40	3.37	3.36	3.34	3.32	3.29	2.95	5.82	5.21	4.87	4.84	4.84	3.80	3.58	3.35

**Table A5. Energy prices (index=2022)**

		Energy Prices (index 2022)																									
Energy source		B								A1								A2									
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029	2030	2022	2023	2024	2025	2026	2027	2028	2029
Gas	1.00	1.00	1.00	1.00	0.99	0.98	0.97	0.96	0.95	1.00	1.00	1.00	0.99	0.98	0.97	0.96	0.95	1.00	2.80	2.80	2.80	2.77	2.75	2.72	2.70	2.67	
Oil	1.00	1.00	1.00	1.00	1.01	1.02	1.03	1.04	1.05	1.00	1.00	1.00	1.01	1.02	1.03	1.04	1.05	1.00	1.54	1.41	1.41	1.43	1.44	1.46	1.47	1.49	
Coal	1.00	1.01	1.02	1.03	1.02	1.02	1.02	1.01	1.01	1.00	1.01	1.02	1.03	1.02	1.02	1.01	1.01	1.00	1.01	1.02	1.03	1.02	1.02	1.01	1.01		
Biomass	1.00	1.02	1.05	1.07	1.07	1.06	1.05	1.05	1.04	1.00	1.02	1.05	1.07	1.07	1.06	1.05	1.05	1.04	1.00	1.02	1.05	1.07	1.07	1.06	1.05	1.04	
Carbon Price	1.00	1.21	1.42	1.63	1.85	2.06	2.27	2.48	2.69	1.00	1.21	1.42	1.63	1.85	2.06	2.27	2.48	2.69	1.00	1.21	1.42	1.63	1.85	2.06	2.27	2.48	2.69
Electricity	1.00	1.00	1.00	1.00	0.98	0.96	0.95	0.93	0.91	1.00	1.00	1.00	0.98	0.96	0.95	0.93	0.91	1.00	1.64	1.64	1.64	1.61	1.58	1.55	1.52	1.49	

**Table A6. Interest rate yields (absolute changes, basis points)**

		Shocks to interest rate yields absolute changes (basis points)																			
Geographic Area	Country	Description	B						A1						A2						
			1Y	2Y	5Y	10Y	20Y	30Y	1Y	2Y	5Y	10Y	20Y	30Y	1Y	2Y	5Y	10Y	20Y	30Y	
EU	Euro area	Interest rate swap on the EUR (euro)	33	29	24	15	8	2	74	70	66	58	39	39	257	250	253	219	225	249	
EU	Bulgaria	Interest rate swap on the BGN (Bulgarian lev)	34	30	27	20	11	4	73	68	66	64	45	32	353	356	424	498	488	483	
EU	Czech Republic	Interest rate swap on the CZK (Czech koruna)	48	38	28	23	20	16	87	76	67	67	53	45	196	275	331	320	291	286	
EU	Denmark	Interest rate swap on the DKK (Danish krone)	33	29	24	15	8	2	74	70	66	58	39	39	219	209	199	146	162	161	
EU	Hungary	Interest rate swap on the HUF (Hungarian forint)	108	87	67	54	40	34	146	126	106	98	74	63	202	313	382	132	126	121	
EU	Poland	Interest rate swap on the PLN (Polish zloty)	44	38	33	28	26	20	83	77	71	72	60	49	380	403	420	321	282	277	
EU	Romania	Interest rate swap on the RON (Romanian leu)	34	30	27	20	11	4	73	68	66	64	45	32	536	512	515	457	447	442	
EU	Sweden	Interest rate swap on the SEK (Swedish krona)	33	29	24	15	8	2	74	70	66	58	39	39	240	228	237	206	208	213	
Rest of Europe	United Kingdom	Interest rate swap on the GBP (British pound)	45	40	35	24	20	19	85	81	77	71	54	51	242	234	252	242	214	211	
Rest of Europe	Norway	Interest rate swap on the NOK (Norwegian krone)	35	33	31	23	9	4	76	74	73	66	40	41	312	308	264	186	186	191	
Rest of Europe	Switzerland	Interest rate swap on the CHF (Swiss franc)	36	31	27	18	10	4	81	76	72	66	42	42	157	155	172	230	223	231	
North America	Canada	Interest rate swap on the CAD (Canadian dollar)	35	32	29	14	11	6	76	73	72	58	42	42	287	330	391	343	320	325	
North America	United States	Interest rate swap on the USD (US dollar)	35	32	29	19	12	8	75	73	71	63	43	44	270	298	329	250	233	244	
Asia	Japan	Interest rate swap on the JPY (Japanese yen)	8	7	6	4	4	4	53	50	48	55	39	44	77	66	59	96	91	107	
Rest of the world		Interest rate swap on the other currencies	40	35	29	21	14	9	81	75	70	66	47	43	266	281	302	260	250	253	

**Table A7. Government bond spreads (absolute changes, basis points)**

		Shocks to government bond spreads absolute changes (basis points)																		
Geographic Area	Country	Swap Rate	B						A1						A2					
			1Y	2Y	5Y	10Y	20Y	30Y	1Y	2Y	5Y	10Y	20Y	30Y	1Y	2Y	5Y	10Y	20Y	30Y
EU	Austria	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Belgium	EUR	8	9	10	13	15	19	23	25	27	29	33	38	193	184	175	162	149	150
EU	Bulgaria	BGN	16	17	19	24	29	29	30	32	34	40	41	51	221	194	168	112	100	110
EU	Croatia	EUR	16	17	19	24	29	29	30	32	34	40	41	51	290	279	267	254	236	246
EU	Cyprus	EUR	16	17	19	24	29	29	30	32	34	40	41	51	290	279	267	254	236	246
EU	Czech Republic	CZK	16	17	19	24	29	29	30	32	34	40	41	51	267	264	260	208	211	221
EU	Denmark	DKK	3	5	7	7	11	16	15	17	20	23	27	31	97	85	75	68	57	56
EU	Finland	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	France	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Germany	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Greece	EUR	16	17	19	24	29	29	30	32	34	40	41	51	290	279	267	254	236	246
EU	Hungary	HUF	16	17	19	24	29	29	30	32	34	40	41	51	198	195	191	177	161	171
EU	Ireland	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Italy	EUR	16	17	19	24	29	29	30	32	34	40	41	51	290	279	267	254	236	246
EU	Latvia	EUR	8	9	10	13	15	19	23	25	27	29	33	38	193	184	175	162	149	150
EU	Lithuania	EUR	8	9	10	13	15	19	23	25	27	29	33	38	193	184	175	162	149	150
EU	Luxembourg	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Malta	EUR	8	9	10	13	15	19	23	25	27	29	33	38	193	184	175	162	149	150
EU	Netherlands	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Poland	PLN	16	17	19	24	29	29	30	32	34	40	41	51	258	254	251	229	212	221
EU	Portugal	EUR	16	17	19	24	29	29	30	32	34	40	41	51	290	279	267	254	236	246
EU	Romania	RON	16	17	19	24	29	29	30	32	34	40	41	51	221	194	168	112	100	110
EU	Slovakia	EUR	3	5	7	7	11	16	15	17	19	23	27	31	97	85	74	68	57	56
EU	Slovenia	EUR	8	9	10	13	15	19	23	25	27	29	33	38	193	184	175	162	149	150
EU	Spain	EUR	16	17	19	24	29	29	30	32	34	40	41	51	290	279	267	254	236	246
EU	Sweden	SEK	3	5	7	7	11	16	15	17	19	23	27	31	88	81	74	68	64	63
EA (weighted averages)	EA (weighted averages)		7	9	11	13	17	20	20	22	24	28	32	38	164	153	142	133	120	122
EU (weighted averages)	EU (weighted averages)		8	10	12	14	19	21	22	23	25	30	33	39	171	161	150	137	124	128
North America	Canada	CAD	8	10	13	11	15	18	20	22	24	28	30	33	47	41	36	46	53	53
North America	US	USD	8	10	13	11	15	18	20	22	24	28	30	33	47	41	36	46	53	53
Rest of Europe	Switzerland	CHF	7	9	11	12	13	17	15	17	19	23	27	31	92	86	80	79	75	76
Rest of Europe	United Kingdom	GBP	8	11	14	16	17	19	21	23	25	28	30	38	150	146	142	136	125	132
Rest of Europe	Norway	NOK	3	5	7	7	11	16	15	17	19	23	27	31	87	93	98	101	86	86
Asia	Japan	JPY	6	11	16	19	18	19	15	21	27	28	29	30	191	185	180	164	150	150
Others	Other countries	USD	9	11	13	15	19	21	19	21	23	27	30	37	124	123	121	113	116	116

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Table A8. Equity shocks (relative changes %)

		Equity relative changes (%)																							
GEO		EU																							
Country		Austria																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.24	-8.48	-13.00	-6.53	-2.74	-13.02	-8.06	-10.73	-11.31	-7.51	-1.84	-2.63	-2.31	-13.01	-10.17	-2.73	-1.28	-10.57	-11.21	-13.01	-6.60	-0.71	-1.33		
A1	-9.13	-10.34	-17.81	-8.88	-5.21	-15.16	-10.36	-12.94	-13.51	-9.83	-4.33	-5.10	-4.79	-17.83	-14.57	-5.00	-1.91	-14.31	-14.92	-16.63	-10.56	-0.97	-2.02		
A2	-16.38	-17.49	-26.32	-20.23	-17.03	-25.71	-21.52	-23.78	-24.27	-21.06	-16.93	-16.66	-28.23	-20.93	-10.39	-8.59	-24.48	-25.01	-26.51	-21.19	-6.63	-8.78			
Country		Belgium																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-8.56	-9.41	-13.00	-6.37	-2.86	-12.99	-9.79	-8.46	-11.82	-4.96	-1.57	-2.52	-2.01	-12.99	-10.54	-2.68	-1.48	-10.53	-10.15	-13.00	-8.10	-0.76	-1.37		
A1	-10.46	-11.28	-17.80	-9.27	-5.90	-15.64	-12.55	-11.28	-14.51	-7.92	-4.66	-5.58	-5.09	-17.76	-14.84	-3.71	-2.21	-13.97	-13.60	-16.32	-11.66	-1.02	-2.02		
A2	-18.61	-19.36	-27.04	-20.09	-17.10	-25.73	-23.00	-21.87	-24.74	-18.89	-16.00	-16.81	-16.38	-26.51	-21.60	-11.87	-11.11	-22.12	-21.79	-24.25	-20.03	-5.42	-9.22		
Country		Bulgaria																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.75	-8.58	-13.18	-6.15	-3.07	-13.17	-9.38	-9.18	-10.65	-5.77	-1.65	-2.56	-2.48	-13.14	-10.64	-2.58	-1.66	-10.86	-11.35	-13.17	-7.91	-0.70	-1.36		
A1	-9.47	-10.28	-18.01	-8.45	-5.46	-15.25	-11.58	-11.39	-12.81	-8.08	-4.09	-4.97	-4.89	-17.95	-15.02	-3.61	-2.39	-14.48	-14.94	-16.67	-11.67	-0.97	-2.04		
A2	-19.79	-20.51	-26.91	-19.43	-16.79	-25.43	-22.19	-22.02	-23.28	-19.11	-15.58	-16.35	-16.28	-26.93	-21.87	-10.84	-11.59	-23.20	-23.61	-25.17	-20.67	-8.82	-9.46		
Country		Croatia																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.75	-8.58	-13.17	-6.16	-3.08	-13.20	-9.40	-9.20	-10.68	-5.79	-1.66	-2.57	-2.48	-13.16	-10.64	-2.58	-1.66	-10.86	-11.37	-13.19	-7.92	-0.70	-1.36		
A1	-9.47	-10.28	-17.96	-8.45	-5.45	-15.27	-11.59	-11.39	-12.82	-8.08	-4.08	-4.96	-4.88	-17.95	-15.02	-3.61	-2.39	-14.47	-14.94	-16.67	-11.66	-0.97	-2.04		
A2	-19.40	-20.12	-26.97	-24.33	-21.86	-29.95	-26.91	-26.76	-27.93	-24.03	-20.72	-21.45	-21.38	-30.81	-23.28	-16.68	-13.94	-25.75	-26.15	-27.65	-23.31	-10.79	-11.68		
Country		Cyprus																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.85	-8.19	-13.05	-6.13	-2.16	-13.08	-12.68	-10.74	-13.08	-7.38	-1.64	-2.54	-2.93	-13.07	-10.05	-2.27	-2.55	-10.78	-11.26	-13.07	-7.73	-0.61	-1.15		
A1	-9.55	-9.89	-17.85	-9.63	-5.84	-16.25	-15.87	-14.02	-16.25	-10.82	-5.35	-6.21	-6.58	-17.88	-14.27	-3.31	-3.65	-13.87	-14.33	-16.06	-10.95	-0.83	-1.70		
A2	-16.38	-16.69	-27.96	-18.23	-14.80	-24.24	-23.90	-22.22	-24.24	-19.31	-14.35	-15.13	-15.47	-25.71	-21.19	-14.17	-14.22	-23.33	-23.74	-25.28	-20.72	-9.16	-9.97		
Country		Czech Republic																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.65	-8.47	-12.99	-6.08	-3.03	-13.01	-9.27	-9.07	-10.52	-5.71	-1.64	-2.53	-2.45	-12.97	-10.47	-2.54	-1.64	-10.72	-11.20	-13.00	-7.81	-0.69	-1.34		
A1	-9.37	-10.17	-17.82	-8.38	-5.43	-15.10	-11.47	-11.29	-12.69	-8.02	-4.08	-4.95	-4.87	-17.80	-14.85	-3.57	-2.37	-14.35	-14.80	-16.51	-11.58	-0.96	-2.02		
A2	-15.40	-16.15	-25.52	-18.64	-16.00	-24.65	-21.41	-21.24	-22.50	-18.32	-14.79	-15.57	-15.50	-26.53	-20.48	-11.61	-9.33	-21.91	-22.33	-23.90	-19.37	-5.80	-6.57		
Country		Denmark																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.65	-8.46	-12.94	-6.06	-3.02	-12.98	-9.25	-9.05	-10.50	-5.69	-1.63	-2.53	-2.44	-12.94	-10.45	-2.54	-1.63	-10.69	-11.17	-12.96	-7.78	-0.69	-1.33		
A1	-9.37	-10.17	-17.74	-8.36	-5.41	-15.06	-11.44	-11.25	-12.66	-8.00	-4.06	-4.93	-4.85	-17.75	-14.81	-3.56	-2.36	-14.30	-14.75	-16.45	-11.54	-0.96	-2.02		
A2	-20.76	-21.45	-29.64	-19.41	-16.83	-25.28	-22.11	-21.95	-23.18	-19.10	-15.65	-16.41	-16.34	-28.72	-20.71	-11.62	-15.05	-26.57	-26.96	-28.41	-24.23	-6.30	-12.45		
Country		Estonia																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-9.08	-9.44	-13.04	-6.52	-4.63	-13.08	-9.31	-9.12	-10.58	-3.90	-1.47	-2.77	-3.46	-13.05	-10.87	-2.51	-2.55	-11.59	-12.65	-13.08	-7.07	-0.82	-1.52		
A1	-10.86	-11.21	-17.86	-8.47	-6.63	-14.85	-11.19	-11.00	-12.42	-5.92	-3.55	-4.82	-5.49	-17.87	-15.38	-3.46	-3.25	-15.09	-16.10	-16.50	-10.79	-1.10	-2.21		
A2	-18.97	-19.28	-25.65	-20.29	-18.71	-25.78	-22.63	-22.47	-23.69	-18.10	-16.06	-17.16	-17.73	-24.66	-22.77	-15.65	-14.19	-24.66	-25.55	-25.90	-20.90	-7.88	-10.88		

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Country		Finland																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.26	-8.58	-12.91	-5.79	-2.17	-12.90	-8.77	-7.31	-8.94	-3.68	-1.32	-2.11	-1.91	-12.90	-9.89	-2.49	-1.26	-10.21	-10.15	-12.87	-7.39	-0.70	-1.17		
A1	-9.11	-10.39	-17.74	-7.60	-4.06	-14.53	-10.50	-9.08	-10.67	-5.54	-3.24	-4.01	-3.81	-17.73	-14.20	-3.42	-1.76	-14.19	-14.14	-16.71	-11.54	-0.95	-1.77		
A2	-13.81	-15.03	-24.59	-16.12	-12.92	-22.39	-18.75	-17.46	-18.90	-14.25	-12.17	-12.87	-12.69	-24.39	-20.96	-8.63	-8.82	-21.47	-21.42	-23.76	-19.05	-4.42	-7.94		
Country		France																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.65	-8.43	-12.96	-5.88	-2.95	-12.99	-9.04	-9.05	-9.64	-5.55	-1.65	-2.72	-2.05	-12.97	-10.74	-2.47	-1.33	-10.81	-10.78	-13.00	-8.49	-0.81	-1.40		
A1	-9.36	-10.12	-17.75	-8.30	-5.46	-15.18	-11.35	-11.37	-11.94	-7.97	-4.20	-5.24	-4.59	-17.76	-15.00	-3.48	-1.84	-14.78	-14.76	-16.84	-12.59	-1.09	-2.08		
A2	-17.70	-18.38	-27.82	-22.44	-20.05	-28.21	-25.00	-25.01	-25.49	-22.16	-19.00	-19.86	-19.32	-26.74	-20.67	-8.13	-9.77	-25.06	-25.03	-26.86	-23.14	-6.08	-9.06		
Country		Germany																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.10	-7.72	-12.84	-6.04	-3.21	-12.87	-12.47	-11.75	-10.20	-7.26	-1.99	-2.45	-2.90	-12.87	-10.24	-2.41	-2.62	-11.40	-12.83	-12.87	-7.62	-0.69	-1.31		
A1	-8.86	-9.47	-17.65	-8.45	-5.71	-15.05	-14.67	-13.97	-12.48	-9.63	-4.54	-4.98	-5.41	-17.69	-14.62	-3.40	-3.82	-14.27	-15.64	-15.68	-10.65	-0.95	-2.07		
A2	-16.77	-17.33	-29.92	-18.74	-16.30	-24.62	-24.28	-23.65	-22.32	-19.79	-15.26	-15.65	-16.04	-27.69	-21.54	-7.98	-12.91	-23.04	-24.27	-24.30	-19.79	-4.99	-8.37		
Country		Greece																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.75	-8.52	-13.05	-5.57	-3.10	-13.08	-9.56	-9.21	-11.47	-5.12	-1.43	-2.18	-2.74	-13.09	-10.50	-2.52	-1.34	-10.87	-10.96	-13.09	-7.74	-0.66	-1.40		
A1	-9.45	-10.20	-17.84	-8.26	-5.88	-15.50	-12.11	-11.77	-13.94	-7.83	-4.26	-4.99	-5.53	-17.89	-14.72	-3.42	-2.20	-14.00	-14.08	-16.12	-11.01	-0.91	-2.04		
A2	-17.79	-18.47	-30.56	-29.57	-27.76	-35.07	-32.49	-32.24	-33.89	-29.24	-26.53	-27.09	-27.50	-28.46	-21.44	-13.77	-12.21	-26.49	-26.56	-28.30	-23.94	-6.72	-9.20		
Country		Hungary																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.83	-8.67	-13.29	-6.21	-3.10	-13.30	-9.47	-9.27	-10.76	-5.83	-1.67	-2.59	-2.50	-13.25	-10.73	-2.61	-1.68	-10.96	-11.45	-13.29	-7.98	-0.71	-1.37		
A1	-9.56	-10.38	-18.13	-8.52	-5.50	-15.39	-11.68	-11.49	-12.92	-8.15	-4.12	-5.01	-4.93	-18.08	-15.12	-3.64	-2.41	-14.59	-15.06	-16.80	-11.77	-0.98	-2.06		
A2	-15.97	-16.74	-28.63	-20.24	-17.59	-26.28	-23.02	-22.85	-24.11	-19.92	-16.37	-17.16	-17.08	-26.52	-28.46	-11.86	-6.30	-23.87	-24.29	-25.86	-21.34	-6.92	-7.74		
Country		Ireland																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-6.93	-8.56	-13.43	-5.56	-3.13	-13.44	-12.41	-9.67	-9.31	-7.24	-1.60	-2.20	-1.91	-13.41	-10.94	-2.36	-1.49	-10.17	-10.95	-13.43	-7.35	-0.51	-1.31		
A1	-8.64	-10.23	-18.21	-8.22	-5.87	-15.82	-14.83	-12.19	-11.84	-9.84	-4.40	-4.98	-4.70	-18.19	-15.06	-3.30	-2.20	-13.15	-13.90	-16.27	-10.45	-0.71	-1.93		
A2	-20.05	-21.44	-32.91	-23.56	-21.62	-29.84	-29.02	-26.84	-26.55	-24.90	-20.40	-20.88	-20.65	-31.24	-26.58	-17.60	-20.39	-29.81	-30.41	-32.30	-27.65	-7.96	-17.82		
Country		Italy																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.59	-8.29	-12.97	-6.03	-3.05	-12.97	-8.06	-7.45	-10.44	-5.84	-1.54	-2.52	-1.76	-12.94	-10.76	-2.92	-1.29	-10.51	-10.81	-12.97	-7.57	-0.77	-1.44		
A1	-9.31	-9.99	-17.76	-8.16	-5.27	-14.90	-10.14	-9.54	-12.45	-7.98	-3.81	-4.76	-4.02	-17.72	-15.22	-4.05	-1.98	-14.01	-14.30	-16.35	-11.21	-1.05	-2.15		
A2	-15.52	-16.16	-26.27	-22.76	-20.34	-28.42	-24.42	-23.92	-26.36	-22.61	-19.11	-19.91	-19.29	-27.15	-20.34	-12.34	-9.43	-23.23	-23.49	-25.32	-20.73	-3.55	-8.12		
Country		Latvia																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.55	-8.36	-13.14	-6.60	-2.98	-13.18	-6.79	-6.96	-11.36	-5.01	-1.69	-2.74	-2.31	-13.15	-10.78	-2.84	-1.51	-11.02	-11.34	-13.17	-8.35	-0.72	-1.40		
A1	-9.30	-10.10	-17.99	-8.98	-5.47	-15.34	-9.15	-9.32	-13.58	-7.44	-4.22	-5.24	-4.82	-18.00	-15.38	-3.79	-2.34	-14.24	-14.55	-16.29	-11.69	-1.00	-2.10		
A2	-19.46	-20.17	-27.71	-20.22	-17.15	-25.79	-20.38	-20.52	-24.26	-18.87	-16.06	-16.95	-16.58	-29.84	-22.66	-15.64	-11.86	-26.32	-26.58	-28.07	-24.13	-7.38	-9.32		
Country		Lithuania																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-6.94	-7.49	-12.95	-5.84	-2.93	-12.96	-5.25	-10.70	-11.21	-3.81	-1.80	-2.63	-2.51	-12.94	-10.97	-2.77	-1.24	-9.82	-12.93	-12.96	-7.01	-0.73	-1.26		
A1	-8.99	-9.52	-17.76	-8.17	-5.35	-15.08	-7.61	-12.88	-13.37	-6.21	-4.27	-5.07	-4.95	-17.76	-15.22	-5.42	-2.03	-13.31	-16.26	-16.29	-10.63	-1.01	-1.91		
A2	-12.39	-12.90	-23.79	-14.90	-12.29	-21.31	-14.38	-19.28	-19.73	-13.08	-11.28	-12.02	-11.91	-20.70	-17.81	-13.62	-6.02	-19.98	-22.71	-22.74	-17.51	-4.72	-5.15		

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Country	Luxembourg																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.72	-8.91	-12.97	-5.87	-1.73	-12.99	-9.61	-9.85	-12.99	-7.33	-1.90	-2.56	-2.63	-13.00	-10.53	-2.20	-2.03	-11.45	-11.95	-13.01	-7.37	-0.66	-1.24	
A1	-9.45	-10.62	-17.77	-8.29	-4.28	-15.18	-11.91	-12.14	-15.18	-9.70	-4.45	-5.08	-5.15	-17.82	-14.60	-2.98	-2.97	-15.22	-15.68	-16.69	-11.35	-0.91	-1.94	
A2	-23.27	-24.25	-29.03	-21.74	-18.35	-27.58	-24.81	-25.01	-27.58	-22.94	-18.49	-19.03	-19.09	-26.71	-24.04	-10.24	-14.62	-29.19	-29.57	-30.40	-26.00	-9.16	-10.95	
Country	Malta																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-6.55	-7.60	-13.10	-6.12	-3.05	-13.10	-9.33	-9.13	-10.59	-5.74	-1.65	-2.55	-2.88	-13.12	-9.34	-2.35	-1.25	-10.81	-12.67	-13.12	-7.12	-0.58	-1.24	
A1	-8.27	-9.29	-17.92	-11.46	-8.61	-17.94	-14.44	-14.26	-15.62	-11.11	-7.31	-8.15	-8.46	-17.94	-13.19	-3.08	-1.88	-13.36	-15.16	-15.59	-9.81	-0.80	-1.84	
A2	-19.00	-19.90	-29.49	-25.02	-22.63	-30.46	-27.52	-27.37	-28.51	-24.73	-21.53	-22.23	-22.50	-32.00	-23.55	-14.53	-16.41	-27.81	-29.29	-29.65	-24.88	-9.35	-14.44	
Country	Netherlands																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-9.03	-8.46	-12.95	-6.51	-3.03	-12.97	-10.54	-7.53	-9.69	-3.96	-1.70	-2.55	-2.52	-12.99	-10.74	-2.47	-1.49	-10.98	-10.42	-12.97	-8.38	-0.73	-1.44	
A1	-11.03	-10.48	-17.74	-9.16	-5.81	-15.39	-13.05	-10.14	-12.23	-6.70	-4.53	-5.34	-5.32	-17.79	-15.18	-3.26	-2.55	-14.10	-13.56	-16.00	-11.61	-0.99	-2.04	
A2	-19.06	-18.56	-28.03	-19.91	-16.97	-25.37	-23.32	-20.77	-22.60	-17.76	-15.85	-16.56	-16.54	-23.93	-23.01	-9.33	-10.60	-23.48	-23.00	-25.16	-21.27	-5.43	-9.21	
Country	Poland																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.82	-8.65	-13.28	-6.21	-3.10	-13.29	-9.47	-9.27	-10.75	-5.83	-1.67	-2.59	-2.50	-13.27	-10.72	-2.60	-1.67	-10.96	-11.46	-13.29	-7.98	-0.70	-1.34	
A1	-9.55	-10.37	-18.13	-8.52	-5.51	-15.39	-11.68	-11.49	-12.93	-8.16	-4.13	-5.01	-4.93	-18.13	-15.14	-3.63	-2.41	-14.61	-15.08	-16.82	-11.78	-0.98	-2.04	
A2	-14.52	-15.30	-23.64	-17.69	-14.95	-23.91	-20.55	-20.38	-21.68	-17.35	-13.69	-14.50	-14.43	-25.75	-22.16	-9.63	-10.99	-22.00	-22.43	-24.03	-19.39	-8.26	-6.71	
Country	Portugal																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.69	-8.46	-13.04	-6.16	-2.87	-13.07	-9.22	-7.85	-9.56	-5.47	-1.55	-2.71	-1.99	-13.06	-11.29	-2.69	-1.30	-10.94	-11.40	-13.07	-7.42	-0.50	-1.44	
A1	-9.42	-10.17	-17.83	-8.14	-4.94	-14.87	-11.12	-9.78	-11.45	-7.47	-3.65	-4.78	-4.08	-17.85	-15.57	-3.58	-2.02	-14.78	-15.21	-16.79	-11.45	-0.68	-2.04	
A2	-17.39	-18.08	-28.56	-18.43	-15.59	-24.40	-21.08	-19.89	-21.37	-17.84	-14.45	-15.45	-14.83	-25.66	-22.59	-11.61	-11.67	-25.34	-25.72	-27.10	-22.44	-6.32	-10.44	
Country	Romania																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.81	-8.64	-13.25	-6.20	-3.09	-13.27	-9.45	-9.25	-10.73	-5.82	-1.67	-2.58	-2.50	-13.26	-10.70	-2.60	-1.67	-10.96	-11.45	-13.29	-7.98	-0.70	-1.34	
A1	-9.53	-10.35	-18.07	-8.50	-5.49	-15.35	-11.66	-11.46	-12.90	-8.14	-4.11	-5.00	-4.92	-18.09	-15.09	-3.62	-2.41	-14.59	-15.05	-16.80	-11.76	-0.98	-2.04	
A2	-11.14	-11.96	-21.36	-14.75	-11.89	-21.25	-17.74	-17.56	-18.92	-14.40	-10.58	-11.42	-11.34	-22.78	-17.33	-7.94	-5.69	-18.84	-19.29	-20.98	-16.11	-1.41	-4.44	
Country	Slovakia																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-6.57	-8.40	-13.14	-6.06	-2.87	-13.15	-10.64	-9.35	-12.18	-4.09	-1.42	-2.53	-2.03	-13.15	-10.12	-2.61	-1.00	-10.05	-10.25	-13.14	-7.81	-0.74	-1.24	
A1	-8.47	-10.26	-18.00	-8.38	-5.29	-15.26	-12.82	-11.57	-14.31	-6.47	-3.89	-4.97	-4.48	-18.01	-14.47	-3.73	-1.56	-13.98	-14.17	-16.90	-11.87	-1.03	-1.94	
A2	-17.67	-19.27	-28.49	-22.51	-19.90	-28.31	-26.26	-25.20	-27.51	-20.90	-18.72	-19.63	-19.22	-29.08	-22.18	-14.62	-13.29	-23.96	-24.13	-26.53	-22.10	-10.00	-10.64	
Country	Slovenia																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.30	-8.66	-13.10	-5.89	-2.90	-13.12	-5.32	-7.47	-11.81	-7.02	-1.57	-2.60	-2.06	-13.11	-10.09	-2.52	-1.08	-10.92	-10.57	-13.13	-7.44	-0.65	-1.24	
A1	-9.19	-10.51	-17.90	-8.11	-5.21	-15.13	-7.56	-9.64	-13.86	-9.20	-3.92	-4.92	-4.39	-17.90	-14.29	-3.49	-1.57	-14.78	-14.44	-16.87	-11.50	-0.89	-1.94	
A2	-15.04	-16.28	-26.19	-17.05	-14.44	-23.38	-16.55	-18.44	-22.23	-18.04	-13.27	-14.18	-13.70	-27.37	-22.40	-13.69	-9.42	-22.77	-22.47	-24.66	-19.79	-6.49	-8.71	
Country	Spain																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.80	-8.58	-13.08	-6.09	-3.06	-13.08	-9.75	-8.97	-9.60	-5.79	-1.63	-2.73	-2.47	-13.08	-10.54	-2.49	-1.48	-10.80	-11.02	-13.07	-7.88	-0.77	-1.34	
A1	-9.53	-10.29	-17.89	-8.47	-5.53	-15.23	-12.01	-11.26	-11.86	-8.18	-4.14	-5.22	-4.96	-17.89	-14.85	-3.22	-2.26	-14.55	-14.76	-16.70	-11.78	-1.04	-2.04	
A2	-17.59	-18.29	-30.13	-30.73	-28.54	-35.76	-33.36	-32.80	-33.25	-30.51	-27.51	-28.31	-28.11	-26.78	-22.81	-10.64	-10.27	-27.33	-27.51	-29.14	-24.99	-4.90	-8.71	
Country	Sweden																							
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other	
B	-7.62	-8.44	-12.94	-6.04	-3.01	-12.93	-9.21	-9.01	-10.46	-5.67	-1.62	-2.51	-2.43	-12.96	-10.46	-2.54	-1.63	-10.66	-11.13	-12.92	-7.76	-0.69	-1.34	
A1	-9.35	-10.15	-17.76	-8.33	-5.40	-15.01	-11.40	-11.22	-12.61	-7.97	-4.06	-4.92	-4.84	-17.79	-14.85	-3.56	-2.36	-14.27	-14.72	-16.42	-11.52	-0.96	-2.04	
A2	-15.35	-16.09	-28.21	-20.95	-18.43	-26.69	-23.59	-23.43	-24.63	-20.64	-17.27	-18.01	-17.95	-29.10	-21.82	-9.13	-11.47	-22.46	-22.87	-24.41	-19.98	-5.51	-7.44	

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GEO	Others																								
Country	UK																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-18.31	-17.86	-23.74	-16.77	-13.64	-23.75	-19.99	-19.74	-21.43	-16.34	-12.31	-13.22	-13.09	-23.74	-21.19	-13.23	-12.27	-21.45	-21.96	-23.75	-18.37	-11.37	-12.02		
A1	-20.68	-21.02	-29.14	-19.84	-16.82	-26.59	-22.95	-22.71	-24.34	-19.42	-15.53	-16.41	-16.28	-29.15	-26.10	-14.89	-13.61	-25.56	-26.05	-27.74	-22.63	-12.22	-13.28		
A2	-29.09	-31.70	-39.37	-32.56	-29.93	-38.40	-35.23	-35.04	-36.46	-32.19	-28.82	-29.58	-29.47	-38.87	-33.53	-23.70	-23.31	-36.09	-36.52	-38.02	-33.51	-18.46	-21.17		
Country	Norway																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-7.63	-7.19	-13.06	-6.10	-2.96	-13.07	-9.31	-9.06	-10.75	-5.66	-1.64	-2.54	-2.42	-13.06	-10.51	-2.55	-1.59	-10.77	-11.28	-13.07	-7.69	-0.69	-1.34		
A1	-11.45	-11.79	-19.92	-10.62	-7.59	-17.36	-13.72	-13.48	-15.12	-10.20	-6.31	-7.18	-7.06	-19.92	-16.88	-5.67	-4.38	-16.33	-16.82	-18.52	-13.41	-3.00	-4.05		
A2	-22.08	-24.69	-32.36	-25.55	-22.92	-31.39	-28.22	-28.03	-29.45	-25.18	-21.81	-22.57	-22.46	-31.86	-26.52	-16.69	-16.30	-29.08	-29.51	-31.01	-26.50	-11.45	-14.16		
Country	Switzerland																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-6.74	-6.30	-12.16	-5.20	-2.07	-12.18	-8.41	-8.16	-9.85	-4.76	-0.74	-1.65	-1.52	-12.16	-9.62	-1.65	-0.69	-9.87	-10.39	-12.18	-6.80	0.00	-0.44		
A1	-7.15	-7.56	-15.62	-6.32	-3.29	-13.07	-9.43	-9.18	-10.82	-5.90	-2.01	-2.89	-2.76	-15.62	-12.58	-1.37	-0.09	-12.03	-12.52	-14.22	-9.11	0.00	-2.88		
A2	-13.23	-15.84	-23.50	-16.70	-14.07	-22.54	-19.37	-19.18	-20.60	-16.32	-12.96	-13.72	-13.61	-23.01	-17.66	-7.84	-7.44	-20.22	-20.66	-22.15	-17.65	-2.60	-5.31		
Country	Canada																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-9.89	-9.44	-15.32	-8.35	-5.22	-15.33	-11.57	-11.32	-13.01	-7.92	-3.89	-4.80	-4.67	-15.32	-12.77	-4.81	-3.85	-13.03	-13.54	-15.33	-9.95	-2.95	-3.60		
A1	-10.12	-10.46	-18.58	-9.28	-6.25	-16.03	-12.39	-12.15	-13.78	-8.86	-4.97	-5.85	-5.72	-18.58	-15.54	-4.33	-3.05	-14.99	-15.48	-17.18	-12.07	-1.66	-5.12		
A2	-17.94	-20.55	-28.21	-21.40	-18.77	-27.24	-24.08	-23.88	-25.30	-21.03	-17.66	-18.43	-18.32	-27.72	-22.37	-12.55	-12.15	-24.93	-25.36	-26.86	-22.35	-7.30	-10.02		
Country	US																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-9.89	-9.44	-15.32	-8.35	-5.22	-15.33	-11.57	-11.32	-13.01	-7.92	-3.89	-4.80	-4.67	-15.32	-12.77	-4.81	-3.85	-13.03	-13.54	-15.33	-9.95	-2.95	-3.60		
A1	-10.12	-10.46	-18.58	-9.28	-6.25	-16.03	-12.39	-12.15	-13.78	-8.86	-4.97	-5.85	-5.72	-18.58	-15.54	-4.33	-3.05	-14.99	-15.48	-17.18	-12.07	-1.66	-5.12		
A2	-17.94	-20.55	-28.21	-21.40	-18.77	-27.24	-24.08	-23.88	-25.30	-21.03	-17.66	-18.43	-18.32	-27.72	-22.37	-12.55	-12.15	-24.93	-25.36	-26.86	-22.35	-7.30	-10.02		
Country	Japan																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-8.21	-7.77	-13.64	-6.68	-3.54	-13.65	-9.89	-9.64	-11.33	-6.24	-2.22	-3.12	-3.00	-13.64	-11.09	-3.13	-2.17	-11.35	-11.86	-13.65	-8.27	-1.27	-1.92		
A1	-10.26	-10.60	-18.72	-9.43	-6.40	-16.17	-12.53	-12.29	-13.93	-9.00	-5.11	-5.99	-5.87	-18.73	-15.69	-4.47	-3.19	-15.14	-15.63	-17.33	-12.22	-1.81	-2.86		
A2	-18.92	-21.53	-29.19	-22.38	-19.76	-28.22	-25.06	-24.86	-26.28	-22.01	-18.65	-19.41	-19.30	-28.70	-23.35	-13.53	-13.13	-25.91	-26.34	-27.84	-23.34	-8.28	-11.00		
Country	Others																								
NACE code	A.01	A.02-A.03	B.05-B.09	C.10-C.12	C.13-C.18	C.19	C.20	C.21-C.22	C.23	C.24-C.25	C.26-C.28	C.29-C.30	C.31-C.33	D.35	E.36-E.39	F.41-F.43	G.45-G.47	H.49	H.50	H.51	H.52-H.53	L.68	Other		
B	-8.10	-8.71	-13.53	-6.56	-3.42	-13.55	-9.78	-9.53	-11.24	-6.12	-2.10	-3.01	-2.88	-13.54	-10.98	-3.02	-2.05	-11.24	-11.76	-13.55	-8.15	-1.16	-1.80		
A1	-9.83	-10.57	-18.30	-9.01	-5.97	-15.76	-12.12	-11.87	-13.53	-8.58	-4.70	-5.58	-5.45	-18.30	-15.25	-4.04	-2.75	-14.70	-15.19	-16.89	-11.76	-1.41	-2.67		
A2	-17.78	-18.89	-27.94	-21.16	-18.52	-27.01	-23.83	-23.64	-25.08	-20.78	-17.41	-18.18	-18.06	-27.46	-22.16	-12.55	-11.97	-24.79	-25.22	-26.72	-22.20	-7.20	-9.89		

**Table A9. Corporate bond spreads (absolute changes, basis points)**

Corporate credit spreads absolute changes (basis points)														
GEO	Country	NACE code	1to2			3			4to6			B	A1	A2
			B	A1	A2	B	A1	A2	B	A1	A2			
Austria	Austria	A01	44.6	65.3	132.0	73.3	98.9	165.4	99.4	139.0	232.4			
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2			
		B05-B09	106.1	141.1	174.4	118.0	158.1	190.2	121.8	177.0	220.4			
		C10-C12	7.1	22.6	82.5	11.7	58.2	118.1	16.4	76.8	166.0			
		C13-C18	14.2	43.0	151.2	33.9	43.0	155.1	47.7	60.4	217.9			
		C19	196.9	209.3	221.7	232.5	234.3	236.0	272.9	302.3	331.7			
		C20	21.9	137.9	342.9	57.5	173.6	378.5	80.9	243.9	498.8			
		C21-C22	38.2	201.0	215.9	73.8	236.7	273.8	103.7	332.6	412.7			
		C23	7.3	146.1	235.0	12.0	181.8	265.5	16.9	255.5	373.2			
		C24-C25	7.6	22.6	68.2	12.6	33.1	103.9	17.7	44.0	135.4			
		C26-C28	9.8	22.6	68.2	16.2	33.6	103.9	22.7	44.9	144.0			
		C29-C30	225.8	256.4	287.0	311.5	317.1	322.7	311.5	405.9	440.3			
		C31-C33	10.5	22.6	68.2	17.4	34.0	103.9	24.5	45.7	141.6			
		D35	99.5	239.1	246.4	126.1	274.8	278.5	126.1	386.2	391.3			
		E36-E39	17.1	52.9	144.1	28.4	88.6	179.7	39.9	124.5	252.6			
		F41-F43	9.1	22.6	68.2	15.1	31.5	92.9	21.3	40.7	108.4			
		G45-G47	9.9	22.6	68.2	16.4	31.1	103.9	23.0	39.9	138.7			
		H49	186.6	208.2	263.9	207.4	231.5	293.3	291.5	325.3	412.3			
		H50	196.7	208.7	301.2	217.4	230.7	332.8	305.6	324.2	467.8			
		H51	176.7	206.3	235.9	197.4	230.4	263.4	277.4	323.8	370.2			
		H52-H53	11.3	22.6	68.2	18.7	33.2	103.9	26.3	44.0	134.6			
		L68	6.6	22.6	68.2	10.4	27.1	77.5	14.3	31.7	87.1			
		Other	6.6	22.6	68.2	8.6	22.6	68.2	8.6	22.6	68.2			
Belgium	Belgium	A01	30.0	64.4	182.8	65.7	100.1	218.5	92.3	140.6	307.1			
		A02-A03	47.3	88.0	280.1	82.9	123.6	315.8	116.5	173.7	443.8			
		B05-B09	60.2	76.5	208.9	62.9	81.4	212.7	64.9	86.8	220.1			
		C10-C12	13.0	29.2	161.6	30.3	85.1	330.9	37.7	109.5	402.5			
		C13-C18	17.7	50.9	161.6	29.3	74.5	197.3	41.2	104.7	245.8			
		C19	18.7	120.2	221.7	30.9	133.5	236.0	43.4	187.6	331.7			
		C20	76.5	182.3	219.8	112.1	218.0	249.5	157.6	306.3	350.7			
		C21-C22	18.8	75.4	244.0	31.2	111.1	279.6	43.8	156.1	393.0			
		C23	21.9	158.4	235.0	57.5	194.1	265.5	80.8	272.7	373.2			
		C24-C25	13.0	29.2	161.6	19.1	39.9	197.3	25.3	50.9	228.4			
		C26-C28	13.0	29.2	161.6	19.3	40.2	197.3	25.8	51.5	235.2			
		C29-C30	47.0	74.4	321.5	82.7	110.0	357.1	116.2	154.6	357.1			
		C31-C33	13.0	29.2	161.6	20.3	42.2	197.3	27.8	55.5	234.9			
		D35	130.2	164.3	198.0	164.9	188.9	223.8	164.9	265.4	314.5			
		E36-E39	16.3	50.5	161.6	27.1	86.2	197.3	38.0	121.1	270.9			
		F41-F43	13.0	29.2	161.6	19.0	38.9	197.3	25.2	48.9	224.1			
		G45-G47	13.0	29.2	161.6	21.1	40.3	197.3	29.4	51.7	232.7			
		H49	148.5	165.7	210.1	165.1	184.3	233.5	232.1	259.0	328.2			
		H50	126.8	134.5	194.1	140.1	148.6	214.5	196.9	208.9	301.4			
		H51	123.4	144.0	164.7	137.8	160.8	183.9	193.6	226.0	258.4			
		H52-H53	13.0	38.8	161.6	20.1	40.0	197.3	27.3	56.3	238.8			
		L68	13.0	29.2	161.6	19.9	37.4	196.4	27.1	45.8	215.6			
		Other	13.0	29.2	161.6	13.0	29.2	161.6	17.7	33.9	166.3			
EU	Bulgaria	A01	44.0	66.3	186.4	73.3	98.9	219.8	101.7	138.4	286.8			
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2			
		B05-B09	27.4	47.9	149.7	51.1	68.6	166.8	68.7	91.7	199.2			
		C10-C12	24.1	39.7	156.7	31.6	73.2	199.8	37.9	94.2	260.2			
		C13-C18	24.1	39.7	174.6	35.4	57.3	204.0	45.1	75.1	264.9			
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1			
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6			
		C21-C22	24.1	83.9	237.6	38.3	124.7	295.9	51.4	186.5	421.3			
		C23	24.1	114.9	239.2	37.0	148.3	270.8	48.0	208.0	372.3			
		C24-C25	24.1	39.7	146.6	29.7	50.5	180.3	35.1	65.2	246.1			
		C26-C28	24.1	39.7	147.4	31.7	53.0	193.5	38.1	64.0	239.5			
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0			
		C31-C33	24.1	39.7	150.4	31.5	55.8	188.2	38.7	69.2	233.0			
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7			
		E36-E39	24.1	62.0	187.5	52.1	110.5	256.5	72.3	168.7	355.2			
		F41-F43	24.1	39.7	151.7	31.8	50.4	183.5	40.7	62.6	209.5			
		G45-G47	24.1	39.7	150.0	32.9	51.5	185.7	40.9	63.6	230.0			
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5			
		H50	142.3	151.0	228.6	158.1	167.5	251.5	219.3	235.4	349.2			
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8			
		H52-H53	24.1	39.7	160.7	31.6	56.9	197.8	38.4	74.2	284.3			
		L68	24.1	39.7	146.6	28.3	44.7	165.9	33.0	50.3	181.6			
		Other	24.1	39.7	146.6	25.7	41.3	150.8	27.6	43.4	158.7			
Croatia	Croatia	A01	44.0	66.3	254.1	73.3	98.9	287.5	101.7	138.4	354.6			
		A02-A03	63.0	92.2	254.1	99.1	133.6	299.9	128.3	179.4	383.4			
		B05-B09	27.4	47.9	254.1	51.1	68.6	271.2	68.7	91.7	303.6			
		C10-C12	24.1	39.7	254.1	31.6	73.2	297.2	37.9	94.2	357.6			
		C13-C18	24.1	39.7	254.1	35.4	57.3	283.5	45.1	75.1	344.4			
		C19	70.5	160.5	254.1	91.6	178.3	269.4	117.4	244.0	357.2			
		C20	24.9	108.8	254.1	40.9	138.2	283.6	55.4	193.6	380.4			
		C21-C22	24.1	83.9	254.1	38.3	124.7	312.4	51.4	186.5	437.8			
		C23	24.1	114.9	254.1	37.0	148.3	285.7	48.0	208.0	387.2			
		C24-C25	24.1	39.7	254.1	29.7	50.5	287.8	35.1	65.2	353.6			
		C26-C28	24.1	39.7	254.1	31.7	53.0	300.2	38.1	64.0	346.2			
		C2												

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
Cyprus	Cyprus	A01	24.1	39.7	254.1	59.7	75.3	289.8	75.7	101.3	335.8
		A02-A03	24.1	39.7	254.1	38.0	75.3	289.8	52.3	99.2	331.2
		B05-B09	93.8	123.8	254.1	183.8	183.8	299.4	250.6	250.6	386.1
		C10-C12	24.1	39.7	254.1	26.8	75.3	289.8	29.5	91.6	323.8
		C13-C18	24.1	39.7	254.1	26.9	50.0	289.8	29.9	60.6	314.2
		C19	70.5	160.5	254.1	91.6	178.3	269.4	117.4	244.0	357.2
		C20	24.1	141.0	254.1	27.0	176.7	289.8	29.9	248.3	382.9
		C21-C22	24.1	48.9	254.1	26.8	84.5	289.8	29.7	118.8	385.2
		C23	34.2	134.6	254.1	69.9	167.7	284.7	98.2	235.7	392.3
		C24-C25	24.1	39.7	254.1	26.8	50.3	289.8	29.6	61.2	315.7
		C26-C28	24.1	39.7	254.1	31.7	53.0	300.2	38.1	64.0	346.2
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	24.1	39.7	254.1	29.2	51.1	289.8	34.5	62.9	314.2
		D35	24.1	111.2	254.1	29.2	127.7	269.2	29.2	179.5	322.3
		E36-E39	43.1	98.1	254.1	78.7	141.7	305.7	110.6	213.3	416.9
		F41-F43	24.1	39.7	254.1	28.0	46.3	289.8	31.9	53.0	308.4
		G45-G47	24.1	39.7	254.1	28.0	48.0	289.8	32.0	56.6	317.7
		H49	203.8	227.4	288.2	226.6	252.8	320.4	318.4	355.3	450.3
		H50	242.5	257.3	371.3	268.1	284.4	410.4	376.7	399.7	576.7
		H51	138.5	198.0	254.1	155.3	221.2	280.6	214.3	310.8	383.1
		H52-H53	24.1	39.7	254.1	27.1	75.3	289.8	30.3	94.4	335.3
		L68	24.1	39.7	254.1	27.7	44.1	267.1	31.5	48.6	280.4
		Other	24.1	39.7	254.1	25.0	41.5	262.1	25.0	41.5	262.1
Czech Republic	Czech Republic	A01	44.0	66.3	208.0	73.3	98.9	241.5	101.7	138.4	308.5
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	27.4	47.9	208.0	51.1	68.6	225.1	68.7	91.7	257.5
		C10-C12	24.1	39.7	208.0	31.6	73.2	251.1	37.9	94.2	311.5
		C13-C18	24.1	39.7	208.0	35.4	57.3	237.5	45.1	75.1	298.4
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	24.1	83.9	237.6	38.3	124.7	295.9	51.4	186.5	421.3
		C23	24.1	114.9	239.2	37.0	148.3	270.8	48.0	208.0	372.3
		C24-C25	24.1	39.7	208.0	29.7	50.5	241.7	35.1	65.2	307.5
		C26-C28	24.1	39.7	208.0	31.7	53.0	254.1	38.1	64.0	300.2
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	24.1	39.7	208.0	31.5	55.8	245.8	38.7	69.2	290.7
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7
		E36-E39	24.1	62.0	208.0	52.1	110.5	277.0	72.3	168.7	375.7
		F41-F43	24.1	39.7	208.0	31.8	50.4	239.8	40.7	62.6	265.8
		G45-G47	24.1	39.7	208.0	32.9	51.5	243.7	40.9	63.6	288.1
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	228.6	158.1	167.5	251.5	219.3	235.4	349.2
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8
		H52-H53	24.1	39.7	208.0	31.6	56.9	245.1	38.4	74.2	331.6
		L68	24.1	39.7	208.0	28.3	44.7	227.3	33.0	50.3	243.0
		Other	24.1	39.7	208.0	25.7	41.3	212.2	27.6	43.4	220.1
Denmark	Denmark	A01	44.0	66.3	186.4	73.3	98.9	219.8	101.7	138.4	286.8
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	27.4	47.9	149.7	51.1	68.6	166.8	68.7	91.7	199.2
		C10-C12	14.0	31.5	156.7	21.6	65.0	199.8	27.8	86.0	260.2
		C13-C18	17.8	35.2	174.6	29.1	52.8	204.0	38.8	70.5	264.9
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	21.4	83.9	237.6	35.6	124.7	295.9	48.7	186.5	421.3
		C23	17.3	114.9	239.2	30.1	148.3	270.8	41.2	208.0	372.3
		C24-C25	13.9	29.6	146.6	19.6	40.5	180.3	25.0	55.2	246.1
		C26-C28	13.8	29.2	147.4	21.5	42.5	193.5	27.8	53.4	239.5
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	15.2	29.9	150.4	22.6	46.0	188.2	29.8	59.5	233.0
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7
		E36-E39	17.3	62.0	187.5	45.3	110.5	256.5	65.5	168.7	355.2
		F41-F43	19.3	33.9	151.7	27.1	44.6	183.5	36.0	56.8	209.5
		G45-G47	15.8	31.2	150.0	24.7	43.0	185.7	32.7	55.1	230.0
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	228.6	158.1	167.5	251.5	219.3	235.4	349.2
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8
		H52-H53	14.5	34.0	160.7	22.0	51.2	197.8	28.8	68.5	284.3
		L68	13.6	29.2	146.6	17.9	34.2	165.9	22.5	39.8	181.6
		Other	13.2	29.2	146.6	14.8	30.9	150.8	16.7	32.9	158.7
Estonia	Estonia	A01	20.1	29.2	161.6	33.3	64.9	197.3	46.8	89.8	229.7
		A02-A03	29.2	67.1	161.6	64.8	102.8	197.3	91.1	144.4	272.8
		B05-B09	16.7	29.2	161.6	32.8	39.5	170.2	44.7	51.0	186.6
		C10-C12	13.2	57.8	212.7	48.9	93.5	248.3	68.7	131.4	349.0
		C13-C18	13.0	29.2	161.6	13.0	29.2	161.6	16.1	35.0	176.0
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	21.4	83.9	237.6	35.6	124.7	295.9	48.7	186.5	421.3
		C23	17.3	114.9	239.2	30.1	148.3	270.8	41.2	208.0	372.3
		C24-C25	20.8	37.9	161.6	34.5	47.2	197.3	48.4	66.4	234.0
		C26-C28	13.0	29.2	161.6	13.0	29.2	161.6	15.9	32.6	173.0
		C29-C30	49.1	64.7	181.4	84.7	100.4	217.1	119.1	141.1	305.1
		C31-C33	13.0	29.2	161.6	17.8	63.0	197.3	22.7	79.6	250.7
		D35	13.0	81.7	161.6	15.5	93.9	175.4	15.5	132.0	223.8
		E36-E39	13.0	30.3	161.6	21.6	40.2	222.2	25.9	56.4	266.5
		F41-F43	13.0	29.2	161.6	16.6	34.9	174.2	20.3	40.8	187.0
		G45-G47	13.0	29.2	161.6	16.0	43.1	197.3	19.2	57.4	273.1
		H49	113.9	127.1	161.6	126.6	141.3	179.6	178.0	198.6	252.2
		H50	105.1	111.5	161.6	116.2	123.3	178.6	163.3	173.3	250.7
		H51	256.0	298.9	341.7	285.9	333.8	381.6	401.9	469.1	536.3
		H52-H53	13.0	32.3	332.2	17.4	68.0	367.8	21.9	95.6	498.8
		L68	13.0	29.2	161.6	13.0	29.2	161.6	17.3	33.9	168.3

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
EU	Finland	A01	131.0	171.7	267.4	166.6	207.3	303.1	234.2	291.4	425.9
		A02-A03	161.9	173.0	273.0	262.2	319.8	319.8	272.9	405.9	405.9
		B05-B09	51.8	71.1	97.2	101.5	105.6	123.3	138.3	143.9	173.3
		C10-C12	6.6	22.6	68.2	9.6	58.2	103.9	12.6	75.9	146.6
		C13-C18	6.6	22.6	68.2	10.3	28.7	103.9	14.0	34.9	103.9
		C19	111.3	166.5	221.7	146.9	191.5	236.0	206.5	269.1	331.7
		C20	6.7	74.0	178.5	11.1	109.6	214.2	15.6	154.0	301.0
		C21-C22	7.3	115.1	245.9	43.0	150.8	281.5	60.4	211.9	395.7
		C23	6.6	53.7	180.1	9.7	89.4	215.8	12.8	125.6	303.3
		C24-C25	7.1	22.6	68.2	11.8	33.4	103.9	16.6	44.5	134.2
		C26-C28	6.6	22.6	68.2	9.5	29.3	103.9	12.4	36.3	120.0
		C29-C30	14.0	22.6	96.3	23.2	44.9	131.9	32.6	59.7	185.4
		C31-C33	6.8	22.6	68.2	11.2	31.4	103.9	15.7	40.4	128.0
		D35	41.0	146.3	194.5	52.0	168.1	219.8	52.0	236.3	308.9
		E36-E39	14.1	124.7	250.4	49.8	160.4	286.1	70.0	225.4	402.1
		F41-F43	7.7	22.6	68.2	12.7	30.3	95.1	17.8	38.3	110.9
		G45-G47	6.6	22.6	68.2	10.5	28.9	103.9	14.5	35.3	129.8
		H49	150.6	168.1	213.0	167.5	186.9	236.8	235.4	262.6	332.8
		H50	113.5	120.4	173.7	125.4	133.1	192.0	176.3	187.0	269.8
		H51	107.4	125.4	143.4	120.0	140.1	160.1	168.6	196.8	225.0
		H52-H53	6.6	22.6	68.2	10.9	35.9	103.9	15.3	49.5	140.7
		L68	6.6	22.6	68.2	9.4	26.2	77.3	12.1	29.8	86.5
		Other	6.6	22.6	68.2	7.9	24.4	75.7	7.9	24.4	75.7
	France	A01	19.4	22.6	68.2	32.1	58.2	103.9	45.1	81.1	138.5
		A02-A03	6.6	25.9	88.3	42.3	61.6	124.0	57.0	86.5	174.3
		B05-B09	26.0	43.6	72.0	50.9	64.7	91.3	69.4	88.2	128.4
		C10-C12	7.9	22.6	87.2	13.0	58.2	122.9	18.3	77.3	172.7
		C13-C18	17.3	47.7	78.2	28.7	71.3	113.8	40.3	100.1	160.0
		C19	8.3	115.0	221.7	13.8	124.9	236.0	19.3	175.5	331.7
		C20	21.0	99.8	299.1	34.7	135.4	334.8	48.7	190.3	470.5
		C21-C22	20.5	116.8	215.9	34.0	152.4	273.8	47.8	214.2	412.7
		C23	16.1	111.1	347.2	26.7	146.7	390.0	37.5	206.2	498.8
		C24-C25	6.6	22.6	68.2	10.8	30.3	103.9	15.1	105.3	332.5
		C26-C28	7.8	22.6	68.2	12.8	31.8	103.9	18.1	41.3	135.5
		C29-C30	107.6	141.0	342.5	143.3	176.6	378.2	201.3	248.2	498.8
		C31-C33	7.8	22.6	68.2	12.9	31.8	103.9	18.1	41.2	128.9
		D35	93.3	188.5	233.3	118.3	216.6	263.6	118.3	304.4	370.5
		E36-E39	19.4	60.3	165.5	32.1	95.9	201.1	45.2	134.8	282.7
		F41-F43	9.6	22.6	68.2	15.8	32.1	99.6	22.3	41.9	118.2
		G45-G47	9.5	22.6	68.2	15.8	30.7	103.9	22.2	39.0	129.4
		H49	172.2	192.1	243.5	191.4	213.6	270.7	269.0	300.2	380.4
		H50	138.2	146.6	211.5	152.7	162.0	233.8	214.6	227.7	328.5
		H51	95.9	112.0	128.0	107.1	125.1	143.0	150.6	175.8	201.0
		H52-H53	9.7	34.2	68.2	16.0	38.1	103.9	22.5	53.6	142.1
		L68	6.6	22.6	68.2	10.3	27.1	77.8	14.0	31.8	87.6
		Other	6.6	23.1	68.2	6.6	23.1	77.3	12.5	23.1	77.3
Germany	Germany	A01	49.8	76.1	119.7	85.4	111.7	155.3	120.1	157.0	218.3
		A02-A03	69.0	102.1	183.3	104.7	137.8	219.0	147.1	193.6	307.7
		B05-B09	21.8	50.4	86.3	42.7	74.9	109.6	58.2	102.0	154.0
		C10-C12	6.8	35.2	68.2	11.2	41.9	103.9	15.7	58.9	144.1
		C13-C18	20.6	36.7	178.8	56.2	72.3	214.4	79.0	101.6	301.3
		C19	22.4	72.5	122.7	22.4	72.5	122.7	31.5	102.0	172.4
		C20	11.8	212.1	219.8	47.5	247.7	249.5	66.7	348.2	350.7
		C21-C22	18.2	94.6	313.1	30.1	130.3	348.8	42.4	183.1	490.2
		C23	18.2	162.5	297.4	30.1	198.2	333.1	42.3	278.5	468.1
		C24-C25	6.6	22.6	68.2	10.8	34.4	103.9	15.1	46.6	141.9
		C26-C28	7.5	22.6	68.2	12.4	31.7	103.9	17.4	41.0	136.1
		C29-C30	175.4	212.1	287.0	211.1	247.7	322.7	272.9	348.2	440.3
		C31-C33	9.1	22.6	68.2	15.1	33.3	103.9	21.3	44.2	133.2
		D35	43.7	134.2	179.1	55.4	154.3	201.3	55.4	216.8	282.9
		E36-E39	7.0	72.1	129.9	42.6	107.8	165.6	59.9	151.4	232.7
		F41-F43	12.7	22.6	68.2	21.0	33.7	86.6	29.6	45.1	105.4
		G45-G47	15.2	22.6	68.2	25.2	36.5	103.9	35.4	50.8	136.8
		H49	225.8	251.9	319.3	257.7	287.6	354.9	311.5	404.2	498.8
		H50	196.7	208.7	301.2	232.4	241.8	332.8	272.9	339.8	467.8
		H51	209.5	244.6	279.7	245.2	278.8	312.3	272.9	405.9	439.0
		H52-H53	8.8	22.6	68.2	14.6	34.1	103.9	20.5	45.8	130.4
		L68	6.6	22.6	68.2	10.3	26.9	76.3	14.1	31.4	84.6
		Other	6.6	22.6	68.2	6.6	26.2	69.1	12.6	35.4	81.3
Greece	Greece	A01	105.5	118.7	254.1	141.1	153.2	287.5	198.3	215.4	354.6
		A02-A03	24.1	39.7	254.1	28.5	53.7	289.8	33.1	68.1	340.7
		B05-B09	24.1	64.0	254.1	42.0	95.0	275.3	55.3	129.5	315.9
		C10-C12	24.1	39.7	254.1	30.1	75.3	289.8	36.4	97.6	395.6
		C13-C18	24.1	39.7	254.1	30.4	66.1	289.8	36.9	80.8	384.2
		C19	58.8	140.3	254.1	94.4	165.2	268.4	132.7	232.2	364.0
		C20	24.1	110.5	254.1	31.4	146.1	283.8	38.9	205.3	385.0
		C21-C22	24.1	137.2	254.1	38.0	172.9	312.0	52.3	243.0	450.9
		C23	24.1	177.3	254.1	33.8	212.9	284.7	43.8	299.3	392.3
		C24-C25	24.1	39.7	254.1	30.2	51.8	289.8	36.4	64.2	371.3
		C26-C28	24.1	39.7	255.7	32.5	52.5	291.4	41.2	65.6	409.5
		C29-C30	104.5	128.5	287.0	140.1	164.2	322.7	196.9	230.8	440.3
		C31-C33	24.1	39.7	254.1	30.1	51.8	289.8	36.3	64.2	342.6
		D35	24.1	129.9	254.1	28.6	149.3	275.9	28.6	209.8	352.6
		E36-E39	26.1	101.8	347.2	61.8	137.5	398.2	86.8	193.2	498.8
		F41-F43	24.1	39.7	254.1	26.8	45.8	289.8	29.7	52.1	317.2
		G45-G47	24.1	39.7	318.0	59.7	75.3	353.7	76.4	95.4	497.1
		H49	203.8	227.4	288.2	226.6	252.8	320.4	318.4	355.3	450.3
		H50	242.5	257.3	371.3	268.1	284.4	410.4	376.7	399.7	576.7
		H51	169.6	198.0	254.1	189.5	221.2	280.6	266.3	310.8	383.1
		H52-H53	24.1	39.7	285.9	33.5	75.3	321.6	43.1	98.6	451.9
		L68	24.1	39.7	254.1	28.0	44.4	289.8	32.0	49.3	323.2
		Other	24.1	39.7	254.1	24.1	39.7	254.1	28.6	49.3	3

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
Hungary	Hungary	A01	44.0	66.3	186.4	73.3	98.9	219.8	101.7	138.4	286.8
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	27.4	47.9	177.3	51.1	68.6	194.4	58.7	91.7	226.8
		C10-C12	24.1	39.7	177.3	31.6	73.2	220.4	37.9	94.2	280.8
		C13-C18	24.1	39.7	177.3	35.4	57.3	206.7	45.1	75.1	267.7
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	24.1	83.9	237.6	38.3	124.7	295.9	51.4	186.5	421.3
		C23	24.1	114.9	239.2	37.0	148.3	270.8	48.0	208.0	372.3
		C24-C25	24.1	39.7	177.3	29.7	50.5	211.0	35.1	65.2	276.8
		C26-C28	24.1	39.7	177.3	31.7	53.0	223.4	38.1	64.0	269.4
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	24.1	39.7	177.3	31.5	55.8	215.1	38.7	69.2	260.0
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7
		E36-E39	24.1	62.0	187.5	52.1	110.5	256.5	72.3	168.7	355.2
		F41-F43	24.1	39.7	177.3	31.8	50.4	209.0	40.7	62.6	235.0
		G45-G47	24.1	39.7	177.3	32.9	51.5	213.0	40.9	63.6	257.3
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	228.6	158.1	167.5	251.5	219.3	235.4	349.2
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8
		H52-H53	24.1	39.7	177.3	31.6	56.9	214.4	38.4	74.2	300.9
		L68	24.1	39.7	177.3	28.3	44.7	196.6	33.0	50.3	212.3
		Other	24.1	39.7	177.3	25.7	41.3	181.4	27.6	43.4	189.3
Ireland	Ireland	A01	14.5	22.8	68.2	24.0	42.8	103.9	33.8	60.2	131.0
		A02-A03	13.1	30.7	68.2	21.7	43.1	103.9	30.5	60.6	137.9
		B05-B09	34.4	67.8	75.8	67.5	100.7	108.7	92.0	137.3	145.3
		C10-C12	6.6	22.6	68.2	8.7	36.6	103.9	10.7	50.9	132.8
		C13-C18	16.1	22.6	188.3	26.6	45.2	223.9	37.4	60.9	314.7
		C19	82.1	94.0	105.9	82.1	94.0	105.9	115.4	132.1	148.9
		C20	6.6	173.4	288.1	9.3	209.1	323.7	12.1	293.8	454.9
		C21-C22	6.6	50.2	140.4	9.4	85.9	176.0	12.3	120.7	247.4
		C23	6.6	22.6	68.2	10.6	58.2	103.9	14.7	75.2	132.9
		C24-C25	6.6	22.6	68.2	8.9	58.2	103.9	11.1	74.2	138.8
		C26-C28	6.6	22.6	68.2	8.5	28.7	103.9	10.5	34.9	130.1
		C29-C30	225.8	256.4	287.0	311.5	317.1	322.7	311.5	405.9	440.3
		C31-C33	6.6	22.6	68.2	9.1	28.8	103.9	11.6	35.2	123.6
		D35	113.7	222.9	255.6	144.1	256.1	288.9	144.1	359.9	406.0
		E36-E39	8.6	22.6	68.2	14.3	58.2	103.9	20.1	81.8	141.8
		F41-F43	8.1	22.6	68.2	13.5	30.3	93.9	18.9	38.2	109.1
		G45-G47	6.6	22.6	68.2	9.7	27.7	103.9	12.9	32.9	123.8
		H49	171.0	190.8	241.8	190.1	212.1	268.8	267.1	298.1	377.7
		H50	163.2	173.1	249.8	180.4	191.4	276.1	253.5	268.9	388.1
		H51	168.0	196.1	224.2	187.6	219.0	250.4	263.7	307.8	351.9
		H52-H53	6.9	22.6	68.2	11.5	31.5	103.9	16.1	40.7	126.8
		L68	6.6	22.6	68.2	9.4	25.7	74.9	12.2	29.0	81.8
		Other	6.6	22.6	68.2	6.6	22.6	68.2	10.9	24.2	68.2
Italy	Italy	A01	24.1	39.7	254.1	59.7	75.3	289.8	75.8	102.8	345.1
		A02-A03	133.0	181.3	310.8	168.6	217.0	346.4	237.0	305.0	486.8
		B05-B09	45.2	79.9	254.1	88.5	118.7	283.8	120.6	161.7	340.7
		C10-C12	24.1	39.7	254.1	31.9	75.3	289.8	39.9	101.4	388.2
		C13-C18	24.1	39.7	254.1	34.3	56.4	289.8	44.9	73.5	371.1
		C19	24.1	253.1	344.7	59.7	288.7	380.4	82.6	405.7	498.8
		C20	24.1	106.9	254.1	37.2	142.6	283.8	50.6	200.4	385.0
		C21-C22	24.1	39.7	254.1	35.6	75.3	289.8	47.4	165.8	596.6
		C23	24.1	149.0	254.1	32.5	184.7	284.7	41.1	259.6	392.3
		C24-C25	24.1	39.7	254.1	30.5	51.9	289.8	37.1	64.4	333.9
		C26-C28	24.1	39.7	254.1	32.1	53.2	289.8	40.4	67.1	346.5
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	24.1	39.7	306.9	38.1	59.2	342.6	52.5	79.3	481.4
		D35	55.3	181.5	254.1	70.0	208.5	280.0	70.0	293.1	371.2
		E36-E39	24.1	69.5	254.1	59.7	105.1	289.8	74.3	147.8	377.2
		F41-F43	24.1	39.7	254.1	30.4	51.2	289.8	36.9	63.0	323.4
		G45-G47	24.1	39.7	254.1	33.1	51.8	289.8	42.3	64.3	334.8
		H49	177.3	197.8	254.1	197.1	219.9	282.1	277.0	309.1	395.1
		H50	155.9	165.4	254.1	172.3	182.8	279.2	242.2	256.9	386.1
		H51	180.4	210.6	254.1	201.5	235.2	282.2	283.2	330.5	391.2
		H52-H53	24.1	39.7	254.1	31.8	53.5	289.8	39.8	67.8	390.8
		L68	24.1	39.7	254.1	29.5	46.4	289.8	35.0	53.3	309.4
		Other	24.1	39.7	254.1	27.0	42.6	257.0	27.0	45.3	289.8
Latvia	Latvia	A01	16.4	29.2	161.6	16.4	29.2	161.6	23.0	38.4	175.7
		A02-A03	83.9	116.0	223.1	119.6	151.7	258.8	168.1	213.2	363.7
		B05-B09	38.7	38.7	161.6	75.9	75.9	176.9	103.5	103.5	206.0
		C10-C12	13.0	29.2	161.6	15.6	64.9	197.3	18.2	82.1	237.0
		C13-C18	13.0	29.2	161.6	20.5	29.2	161.6	21.5	48.5	351.0
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	13.0	29.2	161.6	15.1	34.3	192.2	17.3	39.5	207.7
		C21-C22	13.0	33.1	169.9	21.4	68.8	205.6	30.0	96.7	288.9
		C23	13.2	132.6	235.0	21.8	168.3	265.5	30.7	236.5	373.2
		C24-C25	13.0	29.2	161.6	15.0	35.2	197.3	17.1	41.3	218.5
		C26-C28	13.0	29.2	161.6	22.0	52.2	223.3	26.1	62.4	311.9
		C29-C30	28.1	56.7	194.9	63.8	92.4	230.6	157.3	185.8	324.0
		C31-C33	13.0	29.2	161.6	23.6	55.4	237.9	29.2	68.7	276.9
		D35	53.9	113.5	181.1	68.3	130.4	204.7	68.3	183.3	287.6
		E36-E39	13.0	29.2	161.6	44.5	172.1	401.4	58.8	234.9	508.3
		F41-F43	13.0	29.2	161.6	17.6	36.9	197.3	22.4	44.7	218.5
		G45-G47	13.0	29.2	161.6	16.9	36.5	197.3	21.0	44.0	225.3
		H49	104.7	116.9	161.6	116.4	129.9	178.2	163.6	182.6	244.9
		H50	105.1	111.5	161.6	116.2	123.3	178.6	163.3	173.3	250.7
		H51	256.0	298.9	341.7	285.9	333.8	381.6	401.9	469.1	536.3
		H52-H53	13.0	29.2	161.6	16.5	39.3	197.3	20.1	49.5	222.6
		L68	13.0	29.2	161.6	16.9	34.2	190.4	21.0	39.4	205.2
		Other	13.0	29.2	161.6	15.0					

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
Lithuania	Lithuania	A01	13.0	29.2	161.6	48.6	64.9	197.3	68.0	90.6	250.4
		A02-A03	13.0	29.2	161.6	21.2	40.6	197.3	29.7	52.2	226.7
		B05-B09	19.8	49.2	161.6	38.8	73.1	176.2	52.8	99.6	204.0
		C10-C12	13.0	29.2	161.6	20.1	59.0	197.3	27.4	75.5	258.9
		C13-C18	13.0	29.2	161.6	21.4	41.7	197.3	30.0	54.4	251.7
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	19.1	32.7	161.6	19.1	32.7	161.6	26.9	45.9	193.4
		C21-C22	15.2	38.3	347.2	25.1	73.9	384.0	35.3	103.9	498.8
		C23	18.1	90.4	235.0	30.0	126.0	265.5	42.2	177.1	373.2
		C24-C25	13.0	29.2	161.6	20.0	38.6	197.3	27.2	48.1	238.5
		C26-C28	13.0	29.2	161.6	22.6	39.8	197.3	31.3	50.6	245.0
		C29-C30	40.0	75.2	213.3	75.7	110.9	249.0	106.4	155.8	349.9
		C31-C33	18.1	29.2	179.9	29.9	52.8	215.6	42.0	69.7	303.0
		D35	52.4	109.0	174.3	66.4	125.2	197.0	66.4	176.0	276.9
		E36-E39	13.0	29.2	161.6	41.1	61.5	290.9	53.2	83.3	356.1
		F41-F43	13.0	29.2	161.6	20.3	39.2	197.3	27.8	49.5	226.6
		G45-G47	17.2	29.2	161.6	28.4	42.7	197.3	39.9	56.6	260.0
		H49	123.5	137.8	174.6	137.2	153.1	194.1	192.9	215.2	272.7
		H50	135.5	143.8	207.5	149.8	158.9	229.3	210.5	223.3	322.2
		H51	36.8	43.0	161.6	41.1	48.0	167.4	57.8	67.5	189.6
		H52-H53	13.0	38.7	161.6	44.3	70.0	224.2	58.8	84.5	296.5
		L68	15.8	29.2	161.6	26.2	40.7	197.3	36.8	52.6	236.8
		Other	13.0	29.2	161.6	19.1	32.7	161.6	21.7	39.7	170.3
Luxembourg	Luxembourg	A01	91.4	131.5	245.2	127.0	167.1	280.8	178.5	234.8	394.7
		A02-A03	162.8	174.1	185.3	248.2	265.4	282.5	272.9	291.7	310.5
		B05-B09	78.3	94.2	139.9	80.6	96.5	142.2	83.0	98.9	144.6
		C10-C12	12.0	22.6	76.7	19.9	56.6	112.3	28.0	75.2	157.9
		C13-C18	13.4	22.6	68.2	19.7	41.3	95.1	27.7	54.9	125.7
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	19.5	60.7	206.2	19.5	60.7	206.2	27.4	85.3	289.7
		C21-C22	6.6	27.0	68.2	6.6	27.0	68.2	8.9	38.0	92.2
		C23	6.6	37.1	101.8	6.6	37.1	101.8	9.3	52.1	143.0
		C24-C25	6.6	22.6	68.2	19.3	22.6	68.2	26.0	31.7	92.0
		C26-C28	6.6	22.6	68.2	46.9	87.4	290.4	65.3	116.6	388.5
		C29-C30	225.8	256.4	287.0	311.5	317.1	322.7	311.5	405.9	440.3
		C31-C33	14.2	22.6	68.2	23.6	36.6	103.9	33.1	51.0	140.2
		D35	10.1	84.4	101.8	12.8	97.0	115.0	12.8	136.3	161.6
		E36-E39	10.8	26.2	68.2	67.1	221.0	383.0	94.3	405.9	414.0
		F41-F43	13.1	22.6	68.2	21.6	33.4	103.9	30.4	44.5	128.4
		G45-G47	16.8	41.6	68.2	27.8	64.9	103.9	39.1	91.2	145.2
		H49	109.7	122.5	155.2	122.0	136.1	172.5	171.4	191.3	242.5
		H50	71.6	76.0	109.7	79.2	84.0	121.2	111.3	118.1	170.4
		H51	95.9	112.0	128.0	107.1	125.1	143.0	150.6	175.8	201.0
		H52-H53	12.3	22.6	92.9	20.4	58.2	128.6	28.7	79.5	180.7
		L68	6.6	22.6	68.2	10.7	27.4	78.6	14.9	32.3	89.2
		Other	6.6	22.6	68.2	6.6	22.6	68.2	6.6	22.6	68.2
Malta	Malta	A01	26.3	51.4	161.6	61.9	87.0	197.3	87.0	122.3	275.5
		A02-A03	44.1	115.4	275.2	79.7	151.0	310.8	112.1	212.2	436.8
		B05-B09	57.0	73.3	205.7	59.4	75.6	208.0	61.7	78.0	210.4
		C10-C12	14.0	31.5	161.6	21.6	65.0	204.7	27.8	86.0	265.1
		C13-C18	17.8	35.2	174.6	29.1	52.8	204.0	38.8	70.5	264.9
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	21.4	83.9	237.6	35.6	124.7	295.9	48.7	186.5	421.3
		C23	17.3	114.9	239.2	30.1	148.3	270.8	41.2	208.0	372.3
		C24-C25	13.9	29.6	161.6	19.6	40.5	195.3	25.0	55.2	261.1
		C26-C28	13.8	29.2	161.6	21.5	42.6	207.7	27.8	53.5	253.8
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	15.8	29.2	161.6	26.2	64.9	197.3	36.8	86.1	240.3
		D35	19.2	131.3	164.2	24.3	150.9	185.5	24.3	212.1	260.7
		E36-E39	13.0	63.6	224.8	48.6	99.2	260.5	148.7	272.0	498.8
		F41-F43	14.7	29.2	161.6	24.4	42.1	197.3	34.3	55.2	227.3
		G45-G47	13.0	29.2	161.6	20.0	39.6	197.3	27.2	50.3	234.1
		H49	86.1	96.1	161.6	95.8	106.9	175.2	134.6	150.2	230.1
		H50	149.8	159.0	229.4	165.6	175.7	253.5	232.7	246.9	356.3
		H51	181.1	211.4	241.7	202.2	236.1	269.9	284.2	331.7	379.3
		H52-H53	13.0	29.2	161.6	19.2	40.5	197.3	25.7	52.0	567.5
		L68	13.0	29.2	161.6	17.2	34.1	174.7	21.5	39.2	188.0
		Other	13.0	29.2	161.6	14.8	31.0	163.4	16.6	32.8	165.3
Netherlands	Netherlands	A01	44.6	65.3	132.0	73.3	98.9	165.4	99.4	139.0	232.4
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	71.8	87.8	133.4	74.2	90.1	135.7	76.5	92.4	138.1
		C10-C12	9.3	22.6	96.8	15.3	58.2	132.5	21.5	79.6	186.2
		C13-C18	14.8	29.7	113.4	24.5	65.4	149.0	34.4	91.9	209.5
		C19	15.1	149.3	187.9	15.1	149.3	187.9	21.2	209.8	264.1
		C20	64.3	142.0	219.8	99.9	174.7	249.5	140.5	245.6	350.7
		C21-C22	68.7	142.3	215.9	104.3	189.1	273.8	146.6	405.9	412.7
		C23	11.4	99.6	235.0	18.9	135.3	265.5	26.6	190.1	373.2
		C24-C25	6.8	22.6	68.2	11.3	31.0	103.9	15.9	39.5	126.5
		C26-C28	8.1	22.6	68.2	13.3	32.1	103.9	18.7	41.9	130.3
		C29-C30	225.8	284.1	347.2	272.4	319.7	398.2	272.4	319.7	498.8
		C31-C33	17.3	37.1	68.2	28.6	48.4	103.9	40.3	68.0	141.4
		D35	38.4	154.5	213.3	48.6	177.6	241.0	48.6	249.5	338.7
		E36-E39	20.9	95.1	170.4	56.6	130.8	206.0	79.5	183.8	289.6
		F41-F43	98.0	112.1	165.1	133.7	147.7	200.8	187.8	207.6	282.2
		G45-G47	20.4	42.7	68.2	33.7	45.7	103.9	47.4	64.2	144.7
		H49	231.0	257.7	326.6	256.8	286.5	363.1	360.8	402.7	510.3
		H50	169.2	179.5	259.0	187.0	198.4	286.3	262.8	278.8	402.3
		H51	65.2	76.1	87.0	72.8	85.0	97.2	102.3	119.4	136.6
		H52-H53	11.6	29.7	68.2	19.2	41.9	103.9	27.0	58.9	137.7
		L68	6.6	22.6	68.2	6.6	22.6	68.2	8.3	24.6	72.3
		Other	6.6	22.6	68.2	6.6	22.6	68.2	8.3</		

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
EU	Poland	A01	44.0	66.3	229.4	73.3	98.9	262.8	101.7	138.4	329.9
		A02-A03	63.0	92.2	229.4	99.1	133.6	275.2	128.3	179.4	358.7
		B05-B09	27.4	47.9	229.4	51.1	68.6	246.5	68.7	91.7	278.9
		C10-C12	24.1	39.7	229.4	31.6	73.2	272.5	37.9	94.2	332.9
		C13-C18	24.1	39.7	229.4	35.4	57.3	258.8	45.1	75.1	319.7
		C19	70.5	160.5	229.4	91.6	178.3	244.7	117.4	244.0	332.5
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	24.1	83.9	237.6	38.3	124.7	295.9	51.4	186.5	421.3
		C23	24.1	114.9	239.2	37.0	148.3	270.8	48.0	208.0	372.3
		C24-C25	24.1	39.7	229.4	29.7	50.5	263.1	35.1	65.2	328.8
		C26-C28	24.1	39.7	229.4	31.7	53.0	275.4	38.1	64.0	321.5
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	24.1	39.7	229.4	31.5	55.8	267.2	38.7	69.2	312.1
		D35	62.3	152.2	229.4	78.7	175.4	253.5	78.7	243.5	338.6
		E36-E39	24.1	62.0	229.4	52.1	110.5	298.4	72.3	168.7	397.0
		F41-F43	24.1	39.7	229.4	31.8	50.4	261.1	40.7	62.6	287.1
		G45-G47	24.1	39.7	229.4	32.9	51.5	265.0	40.9	63.6	309.4
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	229.4	158.1	167.5	252.3	219.3	235.4	349.9
		H51	138.5	163.6	229.4	155.3	183.0	251.2	214.3	257.9	335.9
		H52-H53	24.1	39.7	229.4	31.6	56.9	266.5	38.4	74.2	353.0
		L68	24.1	39.7	229.4	28.3	44.7	248.7	33.0	50.3	264.3
		Other	24.1	39.7	229.4	25.7	41.3	233.5	27.6	43.4	241.4
	Portugal	A01	38.1	69.4	254.1	73.8	105.0	289.8	103.7	147.6	363.0
		A02-A03	64.4	98.8	254.1	100.1	134.5	289.8	140.7	189.0	387.3
		B05-B09	32.2	51.3	254.1	63.1	76.2	271.8	86.1	103.8	305.7
		C10-C12	24.1	39.7	254.1	29.7	75.3	289.8	35.5	98.4	351.4
		C13-C18	24.1	39.7	254.1	32.5	51.2	289.8	41.1	63.0	304.6
		C19	31.1	224.4	347.2	66.7	260.1	383.1	93.8	365.5	498.8
		C20	24.1	98.4	309.3	59.7	134.1	345.0	76.5	188.4	484.9
		C21-C22	24.1	93.9	337.8	33.6	129.5	373.5	43.3	182.1	498.8
		C23	24.1	125.5	347.2	59.7	161.2	394.1	77.5	226.5	498.8
		C24-C25	24.1	39.7	254.1	28.8	49.4	289.8	33.6	59.4	322.8
		C26-C28	24.1	39.7	254.1	29.5	49.8	289.8	35.0	60.1	326.3
		C29-C30	117.9	155.0	347.2	153.6	190.7	388.9	215.9	268.0	498.8
		C31-C33	24.1	39.7	254.1	30.7	51.6	289.8	37.4	63.8	334.2
		D35	29.6	114.8	254.1	37.5	132.0	274.3	37.5	185.4	345.6
		E36-E39	24.1	87.1	254.1	59.7	122.8	289.8	83.1	172.6	387.6
		F41-F43	24.1	39.7	254.1	32.6	51.8	289.8	41.3	64.3	316.8
		G45-G47	24.1	39.7	254.1	33.6	52.0	289.8	43.3	64.5	340.2
		H49	147.4	164.5	254.1	163.9	182.8	277.4	230.3	257.0	371.3
		H50	108.6	115.2	254.1	120.0	127.3	271.6	168.7	179.0	346.1
		H51	67.6	78.9	254.1	75.5	88.1	264.6	106.1	123.8	305.5
		H52-H53	24.1	54.4	254.1	31.1	75.8	289.8	38.3	106.5	344.0
		L68	24.1	39.7	254.1	29.2	45.6	289.8	34.5	51.7	312.2
		Other	24.1	39.7	254.1	26.8	43.3	260.8	26.8	43.3	267.5
	Romania	A01	44.0	66.3	186.4	73.3	98.9	219.8	101.7	138.4	286.8
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	27.4	47.9	149.7	51.1	68.6	166.8	68.7	91.7	199.2
		C10-C12	24.1	39.7	156.7	31.6	73.2	199.8	37.9	94.2	260.2
		C13-C18	24.1	39.7	174.6	35.4	57.3	204.0	45.1	75.1	264.9
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	24.1	83.9	237.6	38.3	124.7	295.9	51.4	186.5	421.3
		C23	24.1	114.9	239.2	37.0	148.3	270.8	48.0	208.0	372.3
		C24-C25	24.1	39.7	146.6	29.7	50.5	180.3	35.1	65.2	246.1
		C26-C28	24.1	39.7	147.4	31.7	53.0	193.5	38.1	64.0	239.5
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	24.1	39.7	150.4	31.5	55.8	188.2	38.7	69.2	233.0
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7
		E36-E39	24.1	62.0	187.5	52.1	110.5	256.5	72.3	168.7	355.2
		F41-F43	24.1	39.7	151.7	31.8	50.4	183.5	40.7	62.6	209.5
		G45-G47	24.1	39.7	150.0	32.9	51.5	185.7	40.9	63.6	230.0
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	228.6	158.1	167.5	251.5	219.3	235.4	349.2
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8
		H52-H53	24.1	39.7	160.7	31.6	56.9	197.8	38.4	74.2	284.3
		L68	24.1	39.7	146.6	28.3	44.7	165.9	33.0	50.3	181.6
		Other	24.1	39.7	146.6	25.7	41.3	150.8	27.6	43.4	158.7
	Slovakia	A01	20.0	46.5	143.9	55.6	82.2	179.6	78.1	115.5	252.4
		A02-A03	48.6	80.1	298.6	84.3	115.8	334.3	118.4	162.7	469.8
		B05-B09	55.3	71.2	116.8	57.6	78.8	128.3	59.3	87.3	150.3
		C10-C12	10.8	22.6	137.7	17.8	58.2	173.4	25.0	80.8	243.7
		C13-C18	26.7	41.8	217.3	62.4	77.5	252.9	87.7	108.9	355.5
		C19	207.3	221.5	221.7	242.9	246.9	246.9	272.9	302.3	331.7
		C20	29.4	145.4	347.2	65.1	181.0	384.4	91.4	254.4	498.8
		C21-C22	16.9	84.4	347.2	27.9	120.1	389.4	39.2	168.7	498.8
		C23	21.3	124.2	235.0	35.2	159.8	265.5	49.5	224.6	373.2
		C24-C25	9.7	22.6	68.2	16.1	33.3	103.9	22.6	44.3	144.2
		C26-C28	10.5	22.6	81.2	17.4	33.3	116.9	24.5	44.3	164.3
		C29-C30	13.3	35.6	233.0	49.0	71.3	268.7	68.8	100.2	377.6
		C31-C33	9.8	22.6	68.2	16.3	34.9	103.9	22.9	47.6	140.7
		D35	76.3	172.6	222.2	96.6	198.4	251.1	96.6	278.8	352.9
		E36-E39	7.5	59.4	169.3	43.1	95.1	205.0	43.7	154.8	498.8
		F41-F43	9.4	22.6	68.2	15.5	32.4	103.9	21.8	42.4	130.6
		G45-G47	13.0	22.6	68.2	21.6	33.2	103.9	30.3	44.1	142.9
		H49	161.5	180.2	228.4	179.6	200.4	253.9	252.3	281.6	356.9
		H50	76.5	81.1	117.0	84.5	89.7	129.4	118.8	126.0	181.8
		H51	135.5	158.2	180.8	151.3	176.6	202.0	212.7	248.2	283.8
		H52-H53	10.2	59.3	108.5	16.8	80.5	144.1	23.6	113.1	202.6
		L68	11.3	22.6	68.2	18.6	31.3	103.9	26.2	40.3	129.9
		Other	6.6	22.6	68.2	1					

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
Slovenia	Slovenia	A01	99.2	136.4	264.4	134.8	172.0	300.1	189.5	241.8	421.7
		A02-A03	121.5	162.1	346.1	157.2	197.8	381.8	220.9	278.0	498.8
		B05-B09	39.6	43.7	161.6	77.5	81.6	190.7	105.6	109.7	246.3
		C10-C12	13.0	29.2	161.6	17.6	64.9	197.3	22.3	86.0	248.5
		C13-C18	13.0	29.2	161.6	18.0	40.4	197.3	23.1	51.8	225.9
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	13.0	29.2	161.6	17.9	64.9	197.3	22.9	89.1	258.1
		C21-C22	13.0	29.2	161.6	26.3	176.1	499.3	33.1	238.9	637.7
		C23	15.4	139.4	235.0	25.4	175.1	265.5	35.7	246.0	373.2
		C24-C25	13.0	29.2	161.6	16.7	37.5	197.3	20.5	45.9	219.4
		C26-C28	13.0	29.2	161.6	17.1	37.4	197.3	21.3	45.8	223.3
		C29-C30	208.3	257.0	347.2	243.9	292.7	398.2	272.9	405.9	498.8
		C31-C33	13.0	29.2	161.6	16.9	37.4	197.3	20.8	45.7	222.4
		D35	225.8	250.0	274.2	286.1	298.0	309.8	286.1	360.8	435.5
		E36-E39	13.0	50.2	161.6	48.6	85.9	197.3	63.3	120.7	269.4
		F41-F43	13.0	29.2	161.6	19.0	38.1	197.3	25.1	47.2	217.6
		G45-G47	13.0	29.2	161.6	18.0	36.7	197.3	23.2	44.3	223.8
		H49	102.2	114.1	161.6	113.6	126.8	177.8	159.7	178.2	242.9
		H50	91.6	97.2	161.6	101.2	107.4	176.4	142.3	150.9	239.2
		H51	51.9	60.6	161.6	58.0	67.7	169.7	81.5	95.1	201.1
		H52-H53	13.0	29.2	161.6	18.7	39.5	197.3	24.6	50.1	228.5
		L68	13.0	29.2	161.6	17.4	34.5	175.2	22.0	40.0	189.1
		Other	13.0	29.2	161.6	15.8	33.4	167.7	15.8	33.4	173.7
EU	Spain	A01	24.1	50.0	254.1	59.7	85.7	289.8	83.2	120.4	365.5
		A02-A03	24.1	44.9	254.1	59.7	80.6	289.8	80.7	113.2	375.9
		B05-B09	24.1	39.7	254.1	35.3	58.0	270.5	43.6	78.3	301.8
		C10-C12	24.1	39.7	254.1	30.6	75.3	289.8	37.2	99.3	373.7
		C13-C18	24.1	39.7	254.1	34.4	66.5	289.8	45.1	83.7	355.3
		C19	70.5	160.5	254.1	91.6	178.3	269.4	117.4	244.0	357.2
		C20	24.1	73.3	275.4	31.0	109.0	311.1	38.1	153.2	437.2
		C21-C22	24.1	99.3	254.1	37.4	134.9	312.0	51.0	189.6	450.9
		C23	24.1	88.6	316.7	31.9	124.2	352.4	39.9	174.6	495.2
		C24-C25	24.1	39.7	254.1	29.4	50.7	289.8	34.9	61.9	686.7
		C26-C28	24.1	39.7	254.1	29.9	50.3	289.8	35.8	61.1	331.7
		C29-C30	24.1	39.7	254.1	59.7	75.3	289.8	75.9	101.1	385.0
		C31-C33	24.1	39.7	254.1	31.7	65.9	289.8	39.6	81.2	349.7
		D35	39.5	161.1	254.1	50.1	185.2	282.5	50.1	260.2	382.5
		E36-E39	24.1	54.6	254.1	36.1	90.2	289.8	48.3	126.8	383.3
		F41-F43	24.1	39.7	254.1	31.6	50.3	289.8	39.3	61.2	319.5
		G45-G47	24.1	39.7	254.1	33.0	52.3	289.8	42.2	65.3	340.6
		H49	141.7	158.2	254.1	157.6	175.8	276.5	221.4	247.1	366.8
		H50	115.0	122.0	254.1	127.1	134.9	272.6	178.7	189.6	351.5
		H51	116.2	135.6	254.1	129.7	151.4	272.2	182.3	212.8	342.4
		H52-H53	24.1	39.7	254.1	31.0	71.5	289.8	38.2	88.7	346.0
		L68	24.1	39.7	254.1	28.6	45.2	286.2	33.3	50.9	302.7
		Other	24.1	39.7	254.1	28.2	39.7	254.1	32.4	39.7	254.1
Sweden	Sweden	A01	44.0	66.3	186.4	73.3	98.9	219.8	101.7	138.4	286.8
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	27.4	47.9	149.7	51.1	68.6	166.8	68.7	91.7	199.2
		C10-C12	14.0	31.5	156.7	21.6	65.0	199.8	27.8	86.0	260.2
		C13-C18	17.8	35.2	174.6	29.1	52.8	204.0	38.8	70.5	264.9
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	21.4	83.9	237.6	35.6	124.7	295.9	48.7	186.5	421.3
		C23	17.3	114.9	239.2	30.1	148.3	270.8	41.2	208.0	372.3
		C24-C25	13.9	29.6	146.6	19.6	40.5	180.3	25.0	55.2	246.1
		C26-C28	13.8	29.2	147.4	21.5	42.5	193.5	27.8	53.4	239.5
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	15.2	29.9	150.4	22.6	46.0	188.2	29.8	59.5	233.0
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7
		E36-E39	17.3	62.0	187.5	45.3	110.5	256.5	65.5	168.7	355.2
		F41-F43	19.3	33.9	151.7	27.1	44.6	183.5	36.0	56.8	209.5
		G45-G47	15.8	31.2	150.0	24.7	43.0	185.7	32.7	55.1	230.0
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	228.6	158.1	167.5	251.5	219.3	235.4	349.2
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8
		H52-H53	14.5	34.0	160.7	22.0	51.2	197.8	28.8	68.5	284.3
		L68	13.6	29.2	146.6	17.9	34.2	165.9	22.5	39.8	181.6
		Other	13.2	29.2	146.6	14.8	30.8	150.8	16.7	32.9	158.7

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GEO	Country	NACE code	1to2			3			4to6		
			B	A1	A2	B	A1	A2	B	A1	A2
UK	UK	A01	67.8	96.6	136.3	103.1	130.1	169.7	128.7	170.2	236.8
		A02-A03	74.7	132.5	187.4	104.0	165.5	223.1	133.3	214.6	310.4
		B05-B09	72.4	153.0	162.5	108.9	159.6	210.4	137.6	269.8	283.7
		C10-C12	15.6	47.5	136.3	23.2	83.1	179.4	29.4	104.0	239.8
		C13-C18	20.0	48.2	136.3	31.3	69.9	165.7	41.0	86.2	226.6
		C19	77.2	150.5	223.8	98.3	168.2	238.1	124.2	225.6	326.9
		C20	26.8	142.8	221.8	42.8	172.5	251.6	57.3	229.7	348.4
		C21-C22	25.1	119.9	217.6	39.3	160.0	275.9	52.4	215.9	401.3
		C23	21.3	154.3	236.0	34.1	189.1	267.6	45.2	248.3	369.1
		C24-C25	15.6	46.1	136.3	21.3	58.4	170.0	26.7	73.1	235.8
		C26-C28	15.6	44.8	136.3	23.3	58.2	182.3	29.6	69.1	228.4
		C29-C30	118.5	176.7	268.3	160.4	218.0	306.2	186.1	264.4	403.7
		C31-C33	17.6	45.0	136.3	25.0	64.4	174.1	32.2	77.9	219.0
		D35	97.2	263.9	276.3	127.8	305.5	311.9	159.1	392.5	437.6
		E36-E39	19.7	99.9	151.9	47.8	152.8	204.3	67.9	208.5	302.6
		F41-F43	21.2	27.8	136.3	28.9	62.7	170.7	37.8	74.9	196.7
		G45-G47	17.9	45.6	136.3	26.8	59.7	171.9	34.8	71.3	216.3
		H49	182.4	270.5	321.1	232.2	316.2	357.0	266.1	402.9	496.9
		H50	136.3	235.5	300.2	173.1	272.6	333.1	215.7	351.9	457.3
		H51	104.6	194.5	255.1	136.2	231.3	291.4	175.8	290.7	392.4
		H52-H53	16.2	46.4	136.3	23.8	70.0	173.4	30.6	85.7	259.9
		L68	15.6	27.8	136.3	19.9	39.9	156.2	24.5	60.7	171.8
		Other	15.6	42.6	136.3	18.2	48.2	155.4	19.4	48.8	156.1
Norway	Norway	A01	44.0	66.3	186.4	73.3	98.9	219.8	101.7	138.4	286.8
		A02-A03	63.0	92.2	221.8	99.1	133.6	267.6	128.3	179.4	351.2
		B05-B09	27.4	47.9	149.7	51.1	68.6	166.8	68.7	91.7	199.2
		C10-C12	14.0	31.5	156.7	21.6	65.0	199.8	27.8	86.0	260.2
		C13-C18	17.8	35.2	174.6	29.1	52.8	204.0	38.8	70.5	264.9
		C19	70.5	160.5	229.0	91.6	178.3	244.3	117.4	244.0	332.1
		C20	24.9	108.8	244.3	40.9	138.2	273.8	55.4	193.6	370.6
		C21-C22	21.4	83.9	237.6	35.6	124.7	295.9	48.7	186.5	421.3
		C23	17.3	114.9	239.2	30.1	148.3	270.8	41.2	208.0	372.3
		C24-C25	13.9	29.6	146.6	19.6	40.5	180.3	25.0	55.2	246.1
		C26-C28	13.8	29.2	147.4	21.5	42.5	193.5	27.8	53.4	239.5
		C29-C30	114.5	144.7	269.6	158.6	184.3	307.5	190.2	246.1	405.0
		C31-C33	15.2	29.9	150.4	22.6	46.0	188.2	29.8	59.5	233.0
		D35	62.3	152.2	210.5	78.7	175.4	234.6	78.7	243.5	319.7
		E36-E39	17.3	62.0	187.5	45.3	110.5	256.5	65.5	168.7	355.2
		F41-F43	19.3	33.9	151.7	27.1	44.6	183.5	36.0	56.8	209.5
		G45-G47	15.8	31.2	150.0	24.7	43.0	185.7	32.7	55.1	230.0
		H49	155.9	173.9	229.6	173.6	193.7	254.2	241.3	272.3	353.5
		H50	142.3	151.0	228.8	158.1	167.5	251.5	219.3	235.4	349.2
		H51	138.5	163.6	215.3	155.3	183.0	237.1	214.3	257.9	321.8
		H52-H53	14.5	34.0	160.7	22.0	51.2	197.8	28.8	68.5	284.3
		L68	13.6	29.2	146.6	17.9	34.2	165.9	22.5	39.8	181.6
		Other	13.2	29.2	146.6	14.8	30.9	150.8	16.7	32.9	158.7
Others	US	A01	68.8	113.4	133.7	104.1	146.9	167.2	129.8	187.0	234.2
		A02-A03	75.7	149.3	187.1	105.1	182.2	222.8	134.3	231.4	310.1
		B05-B09	73.5	117.8	162.2	109.9	160.0	210.1	138.6	211.0	283.4
		C10-C12	15.9	64.2	107.5	23.4	99.8	150.6	29.7	120.8	211.0
		C13-C18	21.1	64.9	108.2	32.4	86.7	137.6	42.1	103.0	198.5
		C19	78.3	150.9	223.5	99.3	168.6	237.8	125.2	225.9	326.6
		C20	27.9	159.6	221.5	43.9	189.2	251.3	58.4	246.5	348.1
		C21-C22	26.2	136.7	217.3	40.3	176.8	275.6	53.4	232.7	401.0
		C23	22.3	171.1	235.7	35.2	205.9	267.3	46.2	265.1	368.8
		C24-C25	15.8	34.3	52.9	21.4	75.2	86.6	26.9	89.9	152.4
		C26-C28	15.9	61.6	62.4	23.6	74.9	108.4	29.9	85.9	154.5
		C29-C30	119.6	193.5	268.0	161.4	234.8	305.9	187.1	281.2	403.4
		C31-C33	18.6	61.8	74.7	26.0	81.2	112.5	33.3	94.7	157.4
		D35	98.3	187.1	276.0	128.9	220.3	311.6	160.1	409.3	437.2
		E36-E39	20.8	116.7	151.6	48.8	169.5	204.0	68.9	225.2	302.3
		F41-F43	22.2	27.5	45.8	30.0	48.6	80.4	38.9	91.0	106.2
		G45-G47	19.0	62.3	75.6	27.8	76.5	111.3	35.8	88.0	155.7
		H49	183.4	287.3	320.8	232.2	333.0	356.7	267.1	419.6	496.6
		H50	137.3	252.3	299.9	174.2	289.3	332.8	216.8	368.6	457.0
		H51	105.7	211.3	254.8	137.2	248.1	291.1	176.8	307.4	392.1
		H52-H53	17.3	63.1	91.1	24.8	86.8	128.1	31.6	102.5	214.7
		L68	15.3	27.5	45.8	19.5	39.6	65.6	24.2	49.8	81.3
		Other	12.4	59.4	45.8	15.0	65.0	64.9	16.2	65.6	65.5
Japan	Japan	A01	65.8	93.5	163.7	101.1	127.0	197.1	126.7	167.1	264.2
		A02-A03	72.7	129.4	190.6	102.1	162.4	226.3	131.3	211.5	313.6
		B05-B09	70.4	149.9	165.7	106.9	212.0	213.6	135.6	266.7	286.9
		C10-C12	19.1	44.4	163.7	26.7	80.0	206.8	32.9	101.0	267.2
		C13-C18	19.1	45.1	163.7	30.4	66.8	193.2	40.1	83.1	254.1
		C19	75.3	151.1	227.0	96.3	168.8	241.3	122.2	226.2	330.1
		C20	24.8	139.7	225.0	40.8	169.4	254.8	55.3	226.6	351.6
		C21-C22	23.1	116.8	220.8	37.3	156.9	279.1	50.4	212.8	404.5
		C23	19.3	151.2	239.4	32.2	186.0	270.8	43.2	245.2	372.3
		C24-C25	19.1	43.0	163.7	24.7	55.3	197.4	30.2	70.0	263.2
		C26-C28	19.1	41.7	163.7	26.8	55.1	209.8	33.1	66.0	255.8
		C29-C30	116.5	173.6	271.5	158.4	214.9	309.4	184.1	261.3	406.9
		C31-C33	19.1	41.9	163.7	26.5	61.4	201.5	33.8	74.8	246.4
		D35	95.2	260.8	279.5	125.9	302.4	315.1	157.1	389.4	440.7
		E36-E39	19.1	96.8	163.7	47.2	149.7	216.1	67.3	205.4	314.4
		F41-F43	19.2	28.0	163.7	26.9	59.2	198.2	35.8	71.3	224.1
		G45-G47	19.1	42.5	163.7	27.9	56.6	199.4	36.0	68.2	243.8
		H49	180.4	267.5	324.3	230.2	313.1	360.2	264.1	399.8	500.1
		H50	134.3	232.5	303.4	171.1	269.5	336.3	213.8	348.8	460.5
		H51	102.6	191.4	258.3	134.2	228.2	294.6	173.8	287.6	395.6
		H52-H53	19.1	43.3	163.7	26.6	66.9	200.8	33.4	82.6	287.3
		L68	19.1	28.0	163.7	23.3	51.7	183.6	28.		

**Table A10. Residential Real Estate prices (relative changes 2022-2030, %)**

Shocks to RRE prices relative changes (%)			
	Scenario		
Country	B	A1	A2
AT	14%	14%	-31%
BE	13%	13%	-27%
BG	3%	2%	-6%
CY	10%	9%	-7%
CZ	18%	18%	-27%
DE	15%	15%	-26%
DK	-4%	-5%	-34%
EA	9%	9%	-21%
EE	27%	28%	-1%
ES	7%	6%	-21%
EU	7%	6%	-22%
FI	5%	5%	-15%
FR	6%	6%	-22%
GR	18%	17%	3%
HR	42%	43%	-12%
HU	42%	43%	-16%
IE	9%	8%	-14%
IT	3%	2%	-8%
LT	-14%	-16%	-24%
LU	29%	30%	-28%
LV	51%	52%	-9%
MT	18%	18%	-4%
NL	-6%	-7%	-36%
PL	-29%	-30%	-42%
PT	14%	14%	-25%
RO	8%	7%	-11%
SE	-8%	-8%	-36%
SI	18%	18%	-13%
SK	20%	20%	-18%
CA	24%	24%	-14%
CH	20%	20%	-19%
JP	12%	12%	-18%
NO	31%	31%	-19%
UK	25%	25%	-14%
US	29%	29%	-20%

Table A11. Commercial Real Estate prices (relative changes 2022-2030, %)

Shocks to CRE prices relative changes (%)			
Country	Scenario		
	B	A1	A2
AT	4%	3%	-31%
BE	13%	12%	-30%
BG	-4%	-5%	-29%
CY	13%	12%	-10%
CZ	16%	15%	-27%
DE	-5%	-6%	-38%
DK	-8%	-9%	-38%
EA	10%	9%	-26%
EE	21%	21%	-23%
ES	10%	9%	-23%
EU	8%	7%	-28%
FI	3%	3%	-30%
FR	5%	5%	-26%
GR	23%	23%	-6%
HR	44%	43%	-13%
HU	65%	64%	-4%
IE	18%	17%	-23%
IT	4%	3%	-19%
LT	-16%	-17%	-42%
LU	37%	37%	-14%
LV	61%	60%	-5%
MT	23%	22%	-4%
NL	-10%	-11%	-41%
PL	-25%	-26%	-49%
PT	15%	15%	-26%
RO	11%	10%	-19%
SE	-10%	-11%	-41%
SI	28%	27%	-10%
SK	21%	20%	-25%
CA	24%	24%	-21%
CH	20%	20%	-26%
JP	12%	12%	-25%
NO	31%	31%	-34%
UK	25%	25%	-21%
US	29%	29%	-26%

**Table A12. RMBS spreads (absolute changes, basis points)**

Shocks to RMBS spreads absolute changes (basis points)				
		Scenario		
Geograph	Rating	B	A1	A2
Global	<b>AAA</b>	-8	2	79
Global	<b>AA</b>	20	30	117
Global	<b>A</b>	48	57	258
Global	<b>BBB</b>	75	85	293