

Statistics and analyses

Trends and risks  
of the Italian financial system  
in a comparative perspective



July  
2022

**CONSOB**  
COMMISSIONE NAZIONALE  
PER LE SOCIETÀ E LA BORSA

# Congiuntura e rischi del sistema finanziario italiano in una prospettiva comparata

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Il Rapporto analizza la congiuntura e i rischi del sistema finanziario italiano nel confronto internazionale, avendo riguardo anche alle dinamiche che possono rilevare per il raggiungimento degli obiettivi istituzionali della CONSOB.

The Report analyses trends and risks of the Italian financial system in a comparative perspective, also with regard to the developments that can affect the achievement of CONSOB remit.



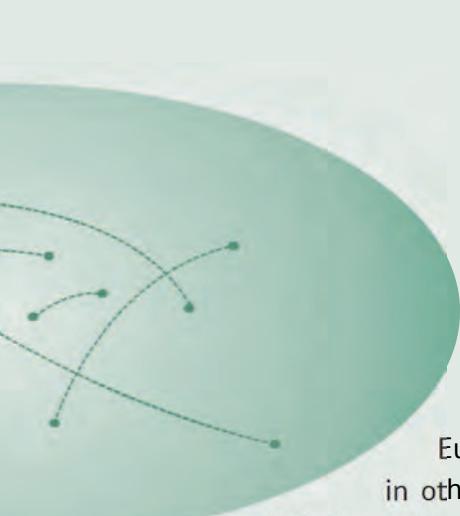


Nel primo semestre del 2022 le prospettive di crescita globale sono state riviste al ribasso a fronte di molteplici fattori: l'invasione dell'Ucraina da parte della Russia; il riacutizzarsi della pandemia di COVID-19; la dinamica crescente dell'inflazione alimentata, nell'ultima parte del 2021, dal rialzo dei prezzi dei beni energetici e da alcune rigidità dell'offerta, e accentuata nel 2022 a seguito dello scoppio del conflitto in Ucraina. Alla luce di tali dinamiche inflattive, nell'Eurozona è in atto la graduale normalizzazione della politica monetaria, già in corso in altre economie avanzate. I tassi di interesse, mantenuti su livelli estremamente bassi negli ultimi anni, sono attesi pertanto in rapida ascesa. In parallelo, a sostegno della crescita e della transizione verde e digitale, prosegue l'attuazione dei programmi lanciati dalla Commissione europea con il NGEU. Tali misure si associano a iniziative tese a mitigare gli scenari di recessione che si prefigurano soprattutto per i paesi connotati da forte dipendenza da fonti energetiche fossili e da vulnerabilità preesistenti, legate ad esempio a elevati livelli di debito pubblico e privato.

I mercati finanziari delle economie più esposte al peggioramento del quadro macroeconomico hanno registrato tensioni significative. Dall'inizio dell'anno gli indici azionari S&P500 e EuroStoxx50 hanno perso entrambi il 20% circa, registrando al contempo un rilevante incremento della volatilità. Per quanto riguarda il mercato italiano, nel primo semestre del 2022 il Ftse Mib ha segnato una diminuzione del 22%, superiore a quella rilevata per le altre maggiori economie dell'Eurozona; la contrazione dei corsi è stata disomogenea tra settori, risultando più intensa nei comparti tecnologico (-30%) e bancario (-21%).

Anche i mercati secondari dei titoli pubblici nell'area euro hanno registrato tensioni crescenti, con rialzi nei rendimenti che, rispetto all'inizio dell'anno, sono saliti di oltre il 2% in Italia, e con un netto incremento della volatilità, che a fine giugno 2022 ha raggiunto i massimi dal 2014. Analogi andamenti si osservano nel mercato secondario dei titoli corporate, dove i rendimenti delle obbligazioni emesse sia dalle banche sia dalle imprese non finanziarie hanno sperimentato una crescita costante dall'inizio dell'anno.

In prospettiva, il ciclo economico globale sperimenterà un deterioramento la cui portata sarà disomogenea tra aree e settori produttivi, anche in funzione dell'impatto dell'elevata inflazione e dell'aumento dei tassi di interesse. Le società non finanziarie e le banche, che nel 2021 hanno mostrato condizioni reddituali e patrimoniali in netto miglioramento, potrebbero vedere accentuate, nel medio termine, le proprie vulnerabilità, a fronte dei riflessi negativi del mutato contesto di riferimento sul costo del debito e sulla qualità del credito. Con specifico riferimento all'Italia, ulteriori criticità potrebbero emergere in relazione alle esposizioni delle banche verso i paesi coinvolti nel conflitto russo-ucraino, al calo del commercio estero e alla difficoltà di ridurre la dipendenza energetica dalla Russia in tempi brevi. Il ridimensionamento delle aspettative di ripresa economica e l'incertezza connessa agli sviluppi geopolitici in corso potranno innescare ulteriori tensioni nei mercati azionari e obbligazionari nei prossimi mesi dell'anno.



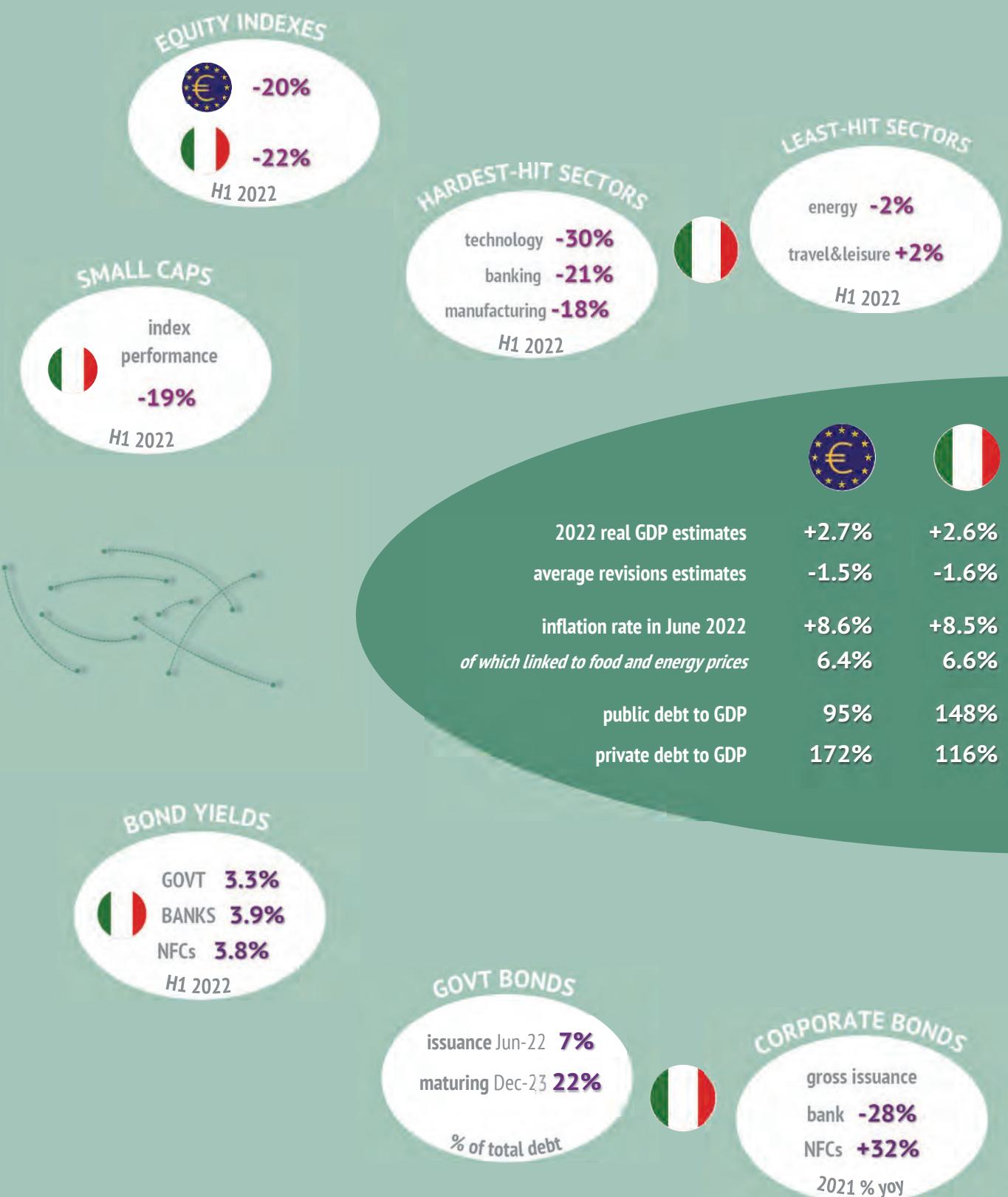
In the first half of 2022, the global economic outlook has been revised downwards in the wake of multiple factors: Russia's invasion of Ukraine; the resurgence of the COVID-19 pandemic; and rising inflation. In the Eurozone, the gradual normalisation of monetary policy, already under way in other advanced economies, is ongoing as a result of the significant rise in inflation, which was fuelled by the rise in energy prices and by some supply rigidities in the latter part of 2021, and finally amplified by the war in Ukraine in 2022. Interest rates, kept at extremely low levels in recent years, are therefore expected to rise rapidly. In order to support growth and accelerate the green and digital transition, the implementation of programmes launched by the European Commission with the NGEU continues. These measures are coupled with initiatives aimed at mitigating the recessionary scenarios that are foreseen especially for countries characterised by high dependence on fossil energy sources and pre-existing vulnerabilities, e.g. related to high levels of public and private debt.

The financial markets of the economies most exposed to the deterioration of the macroeconomic scenario have experienced significant turbulences. Since the beginning of the year, the S&P500 and EuroStoxx50 stock indices have both lost around 20%, while showing a significant increase in volatility. As regards the Italian market, in the first half of 2022, the Ftse Mib fell by 22%, more than the drop observed in the other major Eurozone economies; the fall in stock prices was uneven across sectors, being more marked in the technology (-30%), banking (-21%).

Secondary markets for government bonds in the euro area also experienced growing tensions, with yields rising by more than 2% in Italy compared to the beginning of the year, and with a sharp increase in volatility, which at the end of June 2022 reached its highest level since 2014. A similar trend can be observed in the secondary market for corporate debt instruments, where yields on bonds issued by both banks and non-financial companies have experienced steady growth since the beginning of the year.

The expected worsening of the global economic outlook will be uneven across regions and sectors, also depending on the impact of high inflation and rising interest rates. Non-financial corporations and banks, which in 2021 markedly improved their profitability and capital adequacy, could experience increased vulnerabilities in the medium term, in the wake of the negative impact of this new economic environment on the cost of debt and credit quality. With specific reference to Italy, further issues could emerge in relation to banks' exposures to countries involved in the Russian-Ukrainian conflict, the drop in foreign trade, and the difficulty of reducing energy dependence on Russia in the short term. A further worsening in the expectations about economic growth and the uncertainty surrounding geopolitical developments may trigger further tensions in equity and bond markets in the coming months of the year.

# HIGH



# IGHTS

## NFCs REVENUES

listed companies  
large **+44%**  
SMEs **+14%**  
2021 % yoy



39%  
58%

43%  
59%

gas import from Russia  
gas in storage



total disbursement  
to Italy  
**46 € bnl**  
out of **191.5**



targets  
achieved  
**110**  
out of **1,172**

## LISTED BANKS

RoRWA **1%**  
CET1 ratio **15%**  
2021



## LISTED BANKS

domestic govt bonds  
**10% total assets**  
NPL ratio **3%**  
2021



## NFCs LEVERAGE

listed companies  
large **129%**  
SMEs **102%**  
2021 % yoy  
-23%  
-18%



2021

2021 % yoy

## NFCs ROE

listed companies  
large **11%**  
SMEs **3%**  
2021

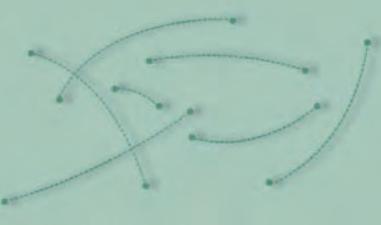


## NFCs ROA

listed companies  
large **3%**  
SMEs **1%**  
2021



2021



## EXPOSURE TO RUSSIA, UKRAINE AND BELARUS

**23 € bnl**  
0.8% total assets  
26% large European  
bank exposures



# SOMMARIO

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# Quadro macroeconomico

## Macroeconomic landscape



Attività economica

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Indicatori di incertezza e di fiducia

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Occupazione e inflazione

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Politica monetaria e fiscale

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Economic activity

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Indicators of uncertainty and economic sentiment

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Unemployment and inflation

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Monetary and fiscal policy

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- Nei primi mesi del 2022 le prospettive di crescita delle maggiori economie avanzate sono state riviste al ribasso per effetto dell'impatto atteso del conflitto in Ucraina sia sulla dinamica dell'inflazione sia sul commercio estero (alla luce delle sanzioni imposte alla Russia). I paesi con una maggiore dipendenza energetica dalla Russia hanno registrato le correzioni più ampie (Fig. 1.1 – Fig. 1.2).
- Gli sviluppi geopolitici ed economici in atto alimentano un'incertezza crescente, soprattutto in Europa, e un deciso calo degli indici di fiducia, interrompendo le tendenze positive registrate l'anno precedente. Continua a pesare inoltre l'evoluzione della pandemia di COVID-19, che nel mese di giugno ha visto una crescita significativa dei contagi a fronte di una contestuale rimozione delle misure restrittive adottate negli ultimi anni in tutti i maggiori paesi dell'area euro (Fig. 1.3 – Fig. 1.7).
- L'inflazione, che già nel 2021 risultava in aumento per effetto della ripresa della domanda globale dei beni energetici e di alcune rigidità nell'offerta, ha raggiunto i massimi nell'area euro e in Italia nel mese di giugno 2022, quando si è portata rispettivamente all'8,6% e all'8,5%. Al rialzo dei prezzi dei beni energetici e dei beni alimentari è riferibile un incremento dell'indice generale pari al 6,4% nell'area euro e al 6,6% in Italia. Tra le materie prime che hanno registrato i maggiori rialzi nel corso del 2022, e in particolare dopo lo scoppio del conflitto in Ucraina, sono compresi il gas naturale, il carbone e il nickel, mentre tra i beni agricoli si annoverano grano e mais (Fig. 1.8 – Fig. 1.10).
- In the first months of 2022, the economic outlook of major advanced countries deteriorated due to the expected impact of the conflict in Ukraine on both inflation and foreign trade (in light of sanctions imposed on Russia). The countries with the largest energy dependence on Russia experienced the largest downward corrections (Fig. 1.1 – Fig. 1.2).
- Ongoing geopolitical and economic developments are fuelling uncertainty, particularly in Europe, and a marked decline in confidence indices, reversing the positive trends recorded the previous year. The evolution of the COVID-19 pandemic is still weighing heavily, with the significant rise in infections experienced in June in the context of a concomitant removal of the restrictive measures adopted in recent years in all major Eurozone countries (Fig. 1.3 – Fig. 1.7).
- Inflation, already on the rise in 2021 due to the recovery of global demand for energy goods and some supply rigidities, reached new highs in the euro area and Italy in June 2022, when it rose to 8.6% and 8.5%, respectively. The surge in the prices of commodities is accountable for an increase in the overall index of 6.4% in the euro area and 6.6% in Italy. Commodities that experienced the greatest upturns during 2022, and particularly after the outbreak of the conflict in Ukraine, include natural gas, coal and nickel, while agricultural goods include wheat and maize (Fig. 1.8 – Fig. 1.10).

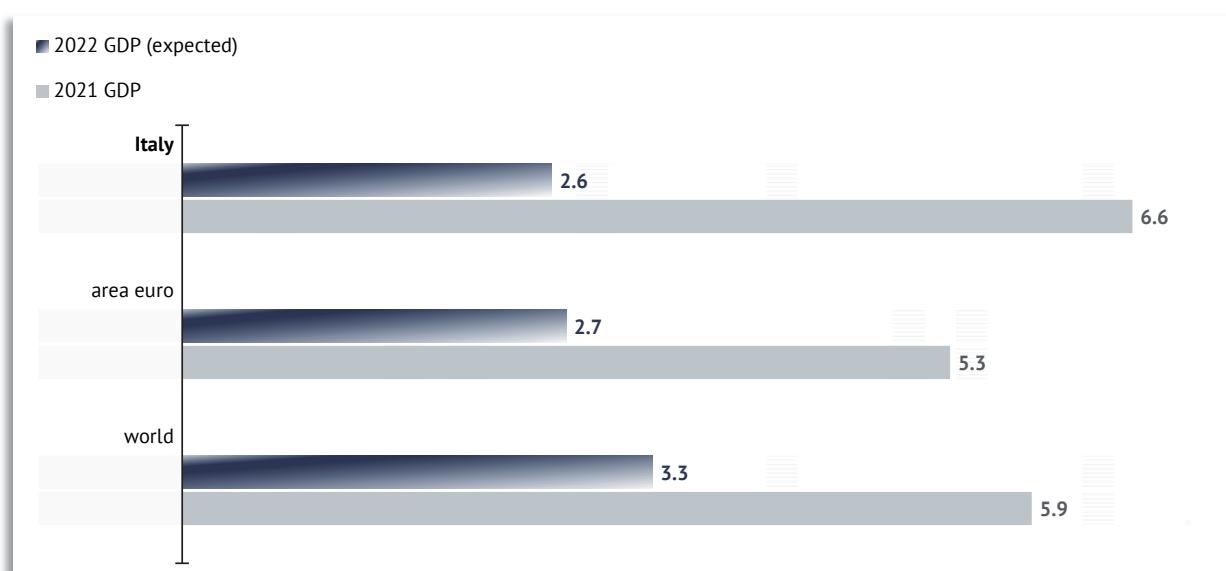
- A fronte delle aspettative di ripresa economica (poi riviste al ribasso come ricordato prima) e della dinamica inflazionistica, la BCE ha annunciato la riduzione graduale, a partire dai primi mesi del 2022, degli acquisti netti di attività finanziarie nell'ambito delle operazioni non convenzionali avviate negli anni precedenti. Gli acquisti nell'ambito del PEPP (*pandemic emergency purchase programme*) sono stati interrotti a marzo, sebbene nei mesi successivi siano lievemente aumentati quelli nell'ambito dell'APP (*asset purchase programme* avviato nel 2015), al fine di rispettare l'annunciata gradualità nella riduzione degli acquisti. A giugno la BCE ha annunciato anche l'interruzione degli acquisti netti di titoli nell'ambito dell'APP a partire da luglio 2022. L'ammontare di titoli complessivamente detenuti dalla BCE ai fini della politica monetaria resta tuttavia elevato e pari a 4.957 miliardi di euro a fine giugno 2022 (di cui 448 miliardi rappresentati da titoli pubblici italiani; Fig. 1.11).
- Con riferimento all'andamento dei principali parametri di finanza pubblica, nel 2021 il rapporto tra debito pubblico e PIL è lievemente diminuito nell'area euro, portandosi al 95%, pur rimanendo ai massimi storici in Italia (148%), Francia e Spagna. Il livello molto basso dei tassi di interesse negli ultimi 10 anni ha contribuito ad abbassare notevolmente le spese per interessi nelle maggiori economie dell'Eurozona: in Italia, in particolare, sono calate dal 5% del PIL nel 2007 al 3% nel 2021. Le più recenti previsioni della Commissione europea
- Given the expectations of economic recovery (later revised downward as mentioned earlier) and inflationary pressures, the ECB announced the gradual reduction, starting in early 2022, of net purchases of financial assets under the unconventional operations launched in previous years. Purchases under the PEPP (pandemic emergency purchase program) were discontinued in March, although those under the APP (asset purchase program initiated in 2015) were slightly increased in the following months, in order to meet the announced graduality. In June, the ECB also announced the discontinuation of net purchases of securities under the APP as of July 2022. However, the total amount of securities held by the ECB for monetary policy purposes remains high and amounted to €4,957 billion at the end of June 2022 (of which 448 billion represented by Italian government bonds; Fig. 1.11).
- With regard to the main public finance indicators in the Eurozone, in 2021 the ratio of public debt to GDP slightly decreased in the euro area to 95%, while remaining at historical highs in Italy (148%), France and Spain. The very low level of interest rates over the last 10 years has, however, contributed to a significant reduction in interest expenses in all countries considered (from 5% of GDP in 2007 to 3% in 2021 in Italy). The European Commission most recent forecasts point to an improvement in public accounts in 2022, with both debt

indicano un miglioramento dei parametri di finanza pubblica nel 2022, con un calo dell'incidenza sia del debito sia del deficit rispetto al PIL in tutti i maggiori paesi (Fig. 1.12 - Fig. 1.13).

- Nel 2021, il debito privato, riferito sia alle famiglie sia alle imprese, ha registrato una lieve diminuzione nelle principali economie dell'Eurozona, dopo l'incremento sperimentato nel 2020; l'Italia continua a caratterizzarsi per valori notevolmente inferiori rispetto a quelli degli altri paesi (Fig. 1.14).

and deficit as a share of GDP falling in all major countries (Fig. 1.12 - Fig. 1.13).

- In 2021, private debt, both household and corporate, declined slightly in the major Eurozone economies, following the increase experienced in 2020; Italy continues to be characterized by values significantly lower than those of other countries (Fig. 1.14).



## ENERGY DEPENDENCE AND TRADE WITH RUSSIA

- La Russia rappresenta il primo paese esportatore netto di gas naturale (con una quota pari a quasi il 23% delle esportazioni globali), il secondo paese esportatore netto di petrolio (13% del dato globale) e il terzo paese con riferimento al carbone (con una quota del 15%). Petrolio, gas naturale e carbone coprono l'85% del fabbisogno energetico globale, con valori lievemente più bassi nelle economie avanzate, in molti casi grazie al maggior ricorso all'energia nucleare (Fig. 1.15).
- Lo scoppio del conflitto in Ucraina ha avuto un impatto significativo sulle prospettive di crescita delle economie europee anche a causa della elevata dipendenza dalla Russia nell'approvvigionamento di risorse energetiche.

Nell'ultimo decennio le importazioni di gas naturale dalla Russia da parte dell'Unione europea sono cresciute, raggiungendo nel 2020 il 39% del totale. Il dato si attesta al 65% e al 43% rispettivamente per Germania e Italia tra i maggiori paesi dell'area euro con la più elevata dipendenza dal gas russo (Fig. 1.16).

- Negli ultimi anni, inoltre, l'Unione europea ha progressivamente ridotto la produzione interna di gas naturale (passata dal 24% del totale nel 2015 al 9% nel 2021). Nel 2022, a seguito dell'invasione dell'Ucraina, gli sforzi per ridurre la dipendenza energetica della UE dalla Russia si sono intensificati, anche sulla scia del nuovo piano REPowerEU pubblicato dalla
- Russia is the leading net exporter of natural gas (with a share of nearly 23% of global exports), the second largest net exporter of oil (13% of the global figure), and the third largest country with regard to coal (with a 15% share). Oil, natural gas and coal cover 85% of global energy needs, with slightly lower values in advanced economies, in many cases due to the wider reliance on nuclear energy (Fig. 1.15).
- The outbreak of the conflict in Ukraine had a significant impact on the growth prospects of European economies also due to the high dependence on Russian energy resources.

Over the past decade, the EU's imports of natural gas from Russia have grown up to 39% of the total in 2020. The figure reaches 65% and 43% respectively for Germany and Italy, which among the largest Eurozone countries record the highest dependence on Russian gas (Fig. 1.16).

- Moreover, in recent years, the EU has progressively reduced its domestic natural gas production (from 24% of the total in 2015 to 9% in 2021). In 2022, following the invasion of Ukraine, efforts to reduce the EU's energy dependence on Russia intensified, also in the wake of the new REPowerEU plan published by the European Commission (see next section

Commissione europea a maggio 2022 (si veda la sezione successiva ‘Misure di sostegno europee e piani nazionali’), con un calo di oltre il 37% dei volumi di gas naturale importati dalla Russia nella prima metà dell’anno rispetto a quelli del precedente anno (Fig. 1.17 - Fig. 1.18).

- Con riferimento specifico all’Italia, le fonti di energia utilizzate nei settori manifatturiero e dei servizi provengono da beni energetici importati dalla Russia per il 29% circa mentre quelle utilizzate nel settore residenziale (per riscaldamento, raffrescamento e impiego in cucina) sono riferibili a fonti russe per il 28%. Si aggiunge, inoltre, la quota di beni energetici di origine russa relativa alla produzione di elettricità, pari al 24% circa del totale (Fig. 1.19).

- Con riferimento al commercio estero della UE, nell’ultimo anno sono cresciute le importazioni dalla Russia e si è ampliato il saldo negativo delle esportazioni nette. Tale dinamica è tuttavia riconducibile a effetti di valutazione connessi al netto rialzo dei prezzi dei beni energetici. Quanto alla composizione del commercio tra UE e Russia, tra i beni esportati dalla UE predominano beni manifatturieri, macchinari e mezzi di trasporto mentre tra quelli maggiormente importati rientrano beni energetici e materie prime. Analoga composizione si osserva in Italia che vede nella Russia il 14° mercato di esportazione (a cui è riferibile l’1,5% delle esportazioni complessive) e il 7° mercato di importazione (a cui è riferibile il 4% del totale; Fig. 1.20 – Fig. 1.21).

‘European support measures and national plans’), with volumes of natural gas imported from Russia in the first half of the year falling by more than 37% compared to the previous year (Fig. 1.17 - Fig. 1.18).

- Specifically, in Italy, energy sources used in the manufacturing and service sectors come from energy goods imported from Russia for about 29%, while those used in the residential sector (e.g. for heating, cooling and cooking) refer to Russian sources for 28% of the total. In addition, 24% of the energy goods related to the production of electricity are imported from Russia (Fig. 1.19).

- With regard to the EU’s external trade, imports from Russia grew last year and the negative balance of net exports widened. However, this dynamic can be attributed to valuation effects related to the sharp rise in the prices of energy goods. As regards the composition of trade between the EU and Russia, manufacturing goods, machinery, and transport equipment predominate among the goods exported by the EU, while energy goods and raw materials are among the most imported. A similar composition is observed in Italy, where Russia is the 14th largest export market (accounting for 1.5% of total exports) and the 7th largest import market (accounting for 4% of total imports; Fig. 1.20 – Fig. 1.21).

## EUROPEAN SUPPORT MEASURES AND NATIONAL PLANS

● Il peggioramento delle prospettive economiche e le perturbazioni del mercato energetico globale causate dall'invasione russa dell'Ucraina hanno ulteriormente innalzato l'attenzione dei *policy makers* su crescita economica e transizione verso un modello di sviluppo sostenibile. Uno strumento di *policy* fondamentale in ambito europeo è il programma Next Generation EU (NGEU) e, in particolare, il Recovery and Resilience Facility (RRF), teso a rendere i paesi dell'Unione europea più resilienti. Il RRF è, infatti, al centro dell'attuazione del piano lanciato dalla Commissione europea e denominato REPowerEU, basato su tre punti cardine: risparmio energetico, diversificazione nell'approvvigionamento e accelerazione delle energie rinnovabili (Fig. 1.23).

○ The deteriorating economic outlook and global energy market disruptions caused by the Russian invasion of Ukraine have further raised the attention of policy makers on economic growth and transition to a sustainable development model. A key policy tool in the European arena is the Next Generation EU (NGEU) program and, in particular, the Recovery and Resilience Facility (RRF), aimed at making EU countries more resilient. The RRF is, in fact, at the heart of the implementation of the plan launched by the European Commission and called REPowerEU, based on three cornerstones: energy saving, diversification in energy sources, and acceleration of renewable energy (Fig. 1.23).



● La Commissione europea reperirà i fondi necessari a finanziarie NGEU sul mercato dei capitali tramite una strategia di finanziamento diversificata, che include l'emissione di obbligazioni *green* per un ammontare pari a 250 miliardi di euro (di cui 23 miliardi già emesse). L'Italia sarà il maggior beneficiario di queste emissioni, seguita da Spagna e Francia (Fig. 1.24).

○ The European Commission will fund NGEU through a diversified financing strategy on capital markets, including the issuance of €250 billion of green bonds (of which €23 billion has already been issued). Italy will be the largest beneficiary of these issues, followed by Spain and France (Fig. 1.24).

- Alla data del presente Rapporto tutti i paesi dell'UE hanno presentato il proprio Piano nazionale di ripresa e resilienza (PNRR), che la Commissione europea ha già approvato in 25 casi. Gli Stati membri hanno destinato, nel complesso, più del 40% della spesa prevista nei propri Piani alla transizione sostenibile e il 26% alla transizione digitale (prevedendo quindi quote superiori a quelle indicate dalla Commissione europea e pari, rispettivamente, a 37% e 20%; Fig. 1.25 - Fig. 1.26).
- L'attuazione del PNRR rappresenta per l'Italia un percorso obbligato per promuovere la crescita e sostenere il maggior debito pubblico accumulato negli anni passati e durante la pandemia. Il 13 agosto 2021 la Commissione europea, a seguito della valutazione positiva del PNRR italiano, ha erogato all'Italia 24,9 miliardi di euro di fondi a titolo di prefinanziamento (di cui 8,957 miliardi a fondo perduto e 15,937 miliardi in prestiti), pari al 13% dell'importo totale stanziato a favore del Paese. Il 13 aprile 2022, la Commissione europea ha versato all'Italia la prima rata da 21 miliardi di euro (10 miliardi di sovvenzioni e 11 miliardi di prestiti) a seguito del raggiungimento di 51 obiettivi previsti dal Piano italiano entro il 31 dicembre 2021, misurati attraverso specifici traguardi sia qualitativi (i cosiddetti *milestones*, ad esempio la legislazione adottata o la piena operatività dei sistemi informativi) sia quantitativi (i cosiddetti *targets*, ad esempio chilometri di ferrovie costruite, numero di studenti che hanno completato la formazione).
- As of the date of this Report, all EU countries have submitted their own National Recovery and Resilience Plans (RRPs), which the European Commission has already approved in 25 cases. Overall, Member States have allocated more than 40% of the planned spending to green transition and about 26% to digital transition (thus providing for higher shares than those indicated by the European Commission and amounting to, respectively, 37% for and 20%; Fig. 1.25 - Fig. 1.26).
- The implementation of the RRP is essential for Italy to promote growth and sustain the increased public debt accumulated over the past years and during the pandemic. On 13 August 2021, the European Commission, following the positive assessment of the Italian RRP, disbursed €24.9 billion in pre-financing funds to Italy (including 8.957 billion in grants and 15.937 billion in loans), representing 13% of the total amount allocated to the country. On 13 April 2022, the European Commission paid Italy the first instalment amounting to €21 billion (10 billion in grants and 11 billion in loans), following the achievement of 51 targets under the Italian Plan by 31 December 2021, measured through specific goals both qualitative (so-called milestones, e.g., legislation adopted or information systems fully operational) and quantitative (so-called targets, e.g., km of railways built, number of students completing education).

Secondo le rilevazioni della Commissione europea alla data del 15 dicembre 2021 in media circa il 10% di tutti gli obiettivi previsti dal Piano italiano sono stati raggiunti (Fig. 1.27).

- Il pagamento della prima rata del PNRR italiano (il cui importo è maggiore di quello ricevuto finora da principali Stati membri) rappresenta un ulteriore passaggio nel percorso di attuazione degli investimenti e delle riforme previsti dal Piano italiano (Fig. 1.28).
- Rimangono rilevanti i passaggi da compiere e le scadenze che l'Italia deve rispettare nei prossimi mesi. Entro il 30 giugno 2022, per ottenere il versamento della seconda rata di esborsi (formalmente richiesta il 29 giugno) il nostro Paese dovrà dimostrare di aver raggiunto 45 obiettivi relativi a tutte le missioni del Piano italiano (ad eccezione della missione 3 sulla mobilità sostenibile) e, in particolare, le macroaree concernenti digitalizzazione (14 obiettivi), rivoluzione verde e transizione ecologica (14 obiettivi) che richiederanno maggiori sforzi. Inoltre, per il conseguimento dei restanti obiettivi del Piano italiano entro la fine del 2022 dovranno essere rispettate 100 scadenze europee, che salgono a 476 entro il 2026 (di cui più dell'80% ancora da avviare) e che includono riforme complesse come quelle su appalti pubblici, sistema giudiziario e pubblica amministrazione (Fig. 1.29).

According to the European Commission, as of 15 December 2021, on average, about 10% of all targets under the Italian Plan have been achieved (Fig. 1.27).

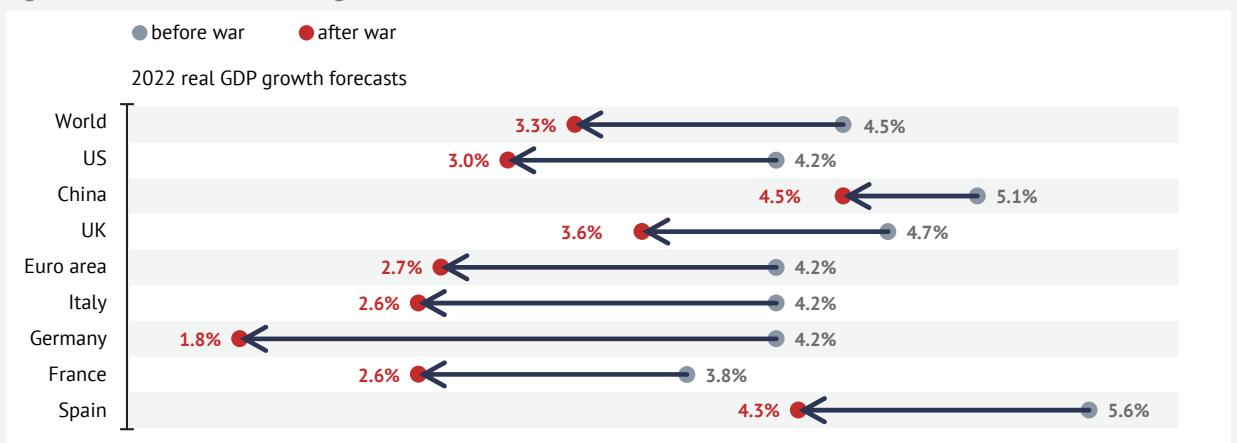
- The payment of the first instalment of the Italian RRP (which is larger than that received so far by major Member States) is a further step in the implementation of the investments and reforms envisaged by the Italian Plan (Fig. 1.28).
- The steps to be taken and the deadlines that Italy must meet in the coming months remain relevant. By 30 June 2022, in order to qualify for the second instalment of disbursements, (formally requested on 29 June), our country will have to deliver 45 targets (related to all the missions of the Italian Plan (with the exception of mission 3 on sustainable mobility) and, in particular, the macro-areas concerning digitalisation (14 targets), green revolution and ecological transition (14 targets) that will require greater efforts. In addition, 100 European deadlines will have to be achieved by the end of 2022, rising to 476 by 2026 (more than 80% of which have yet to be initiated) and including complex reforms such as those on public procurement, the judiciary system, and public administration (Fig. 1.29).

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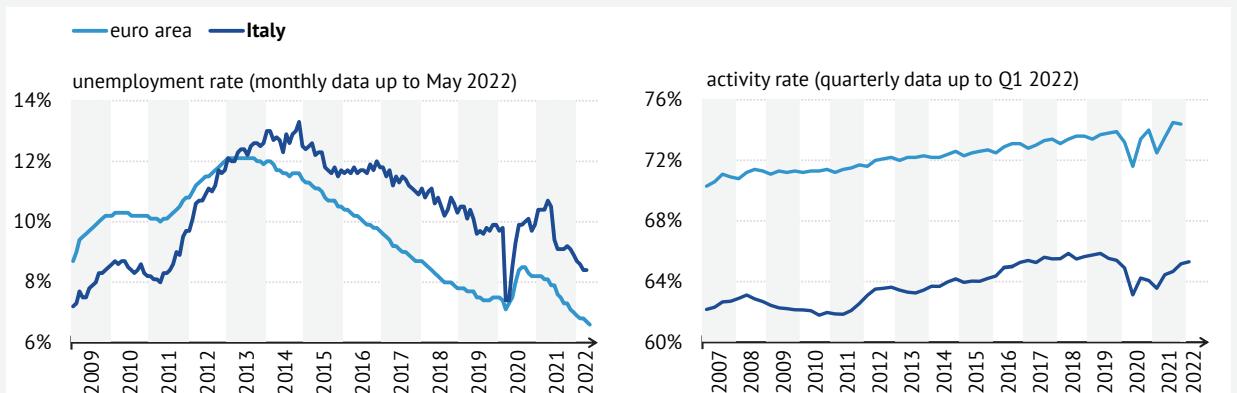
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**Fig. 1.1 – Revisions in real GDP growth forecasts for 2022 in the main advanced countries**



Source: calculations on OECD, IMF and European Commission data. Figure refers to average values of GDP forecasts published in OECD Economic Outlook June 2022, IMF World Economic Outlook April 2022 and European Commission Spring Forecasts May 2022 and Summer Forecasts July 2022 for euro area countries only.

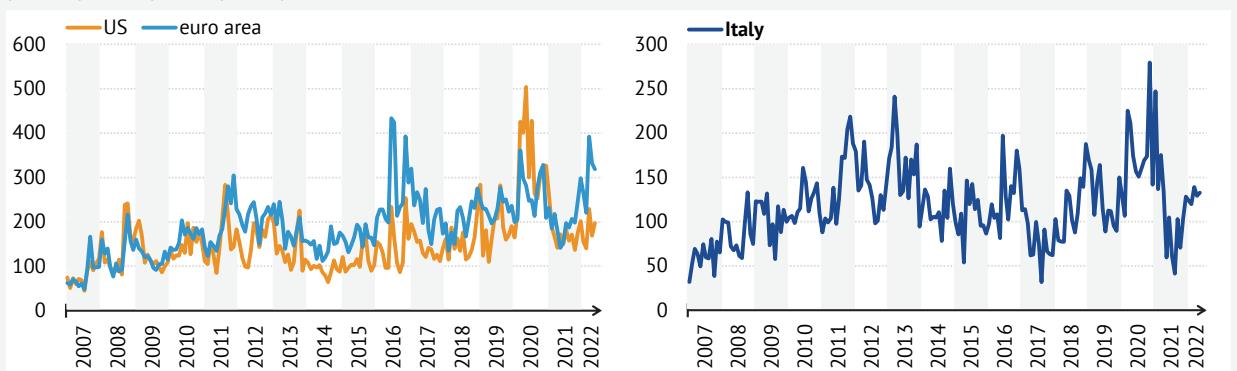
**Fig. 1.2 – Unemployment and activity rate in the euro area**



Source: European Commission DG - ECFIN, Eurostat, Istat. Figure on the left reports the unemployment rate as a percentage of active population; time series are seasonally adjusted. Figure on the right reports the activity rate computed as the ratio between the workforce (employed and unemployed) and population aged 15 years or more.

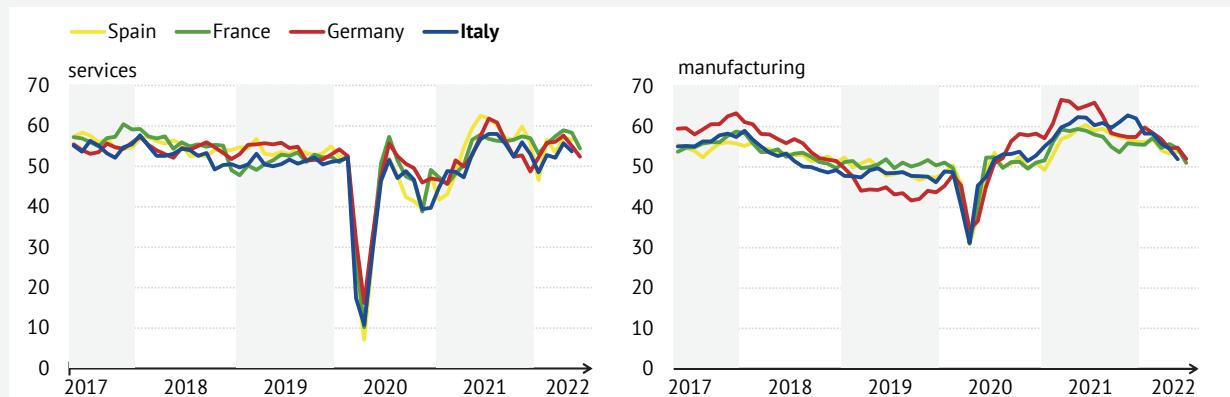
**Fig. 1.3 – Economic policy uncertainty indicators in the US and in Europe**

(monthly data up to May 2022)



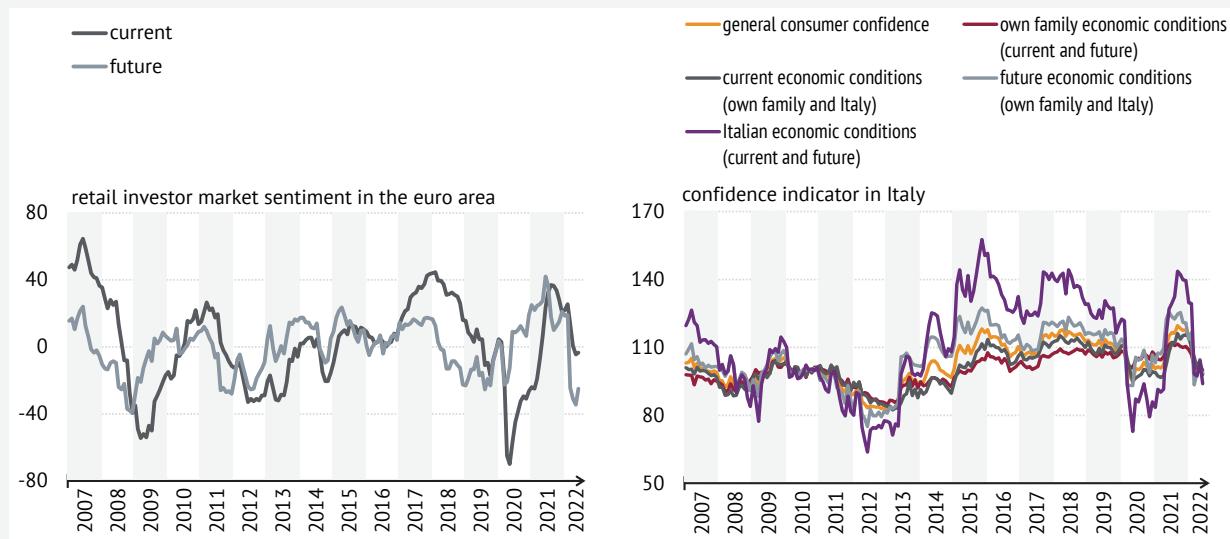
Source: Economic Policy Uncertainty Index. The indicators are computed by counting the number of newspaper articles containing the terms uncertain or uncertainty, economic or economy, and one or more policy-relevant terms. For the US the newspapers considered are USA Today, the Miami Herald, the Chicago Tribune, the Washington Post, the Los Angeles Times, the Boston Globe, the San Francisco Chronicle, the Dallas Morning News, the Houston Chronicle, and the WSJ. For the European index the newspapers considered are Le Monde and Le Figaro for France, Handelsblatt and Frankfurter Allgemeine Zeitung for Germany, Corriere Della Sera and La Stampa for Italy, El Mundo and El País for Spain, and The Times of London and Financial Times for the United Kingdom.

**Fig. 1.4 – PMI indexes in the main euro area countries**  
(monthly data up to June 2022)



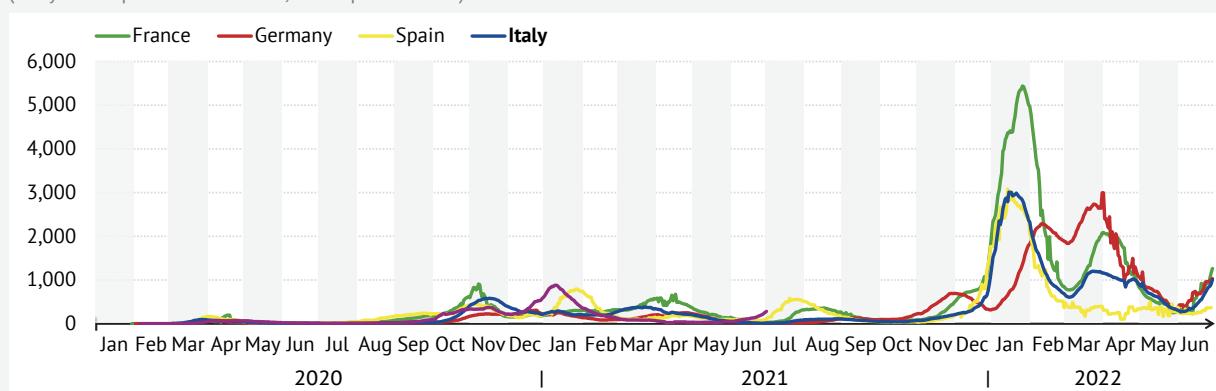
Source: Refinitiv Datastream.

**Fig. 1.5 – Sentiment indicators in the euro area**  
(monthly data up to June 2022)



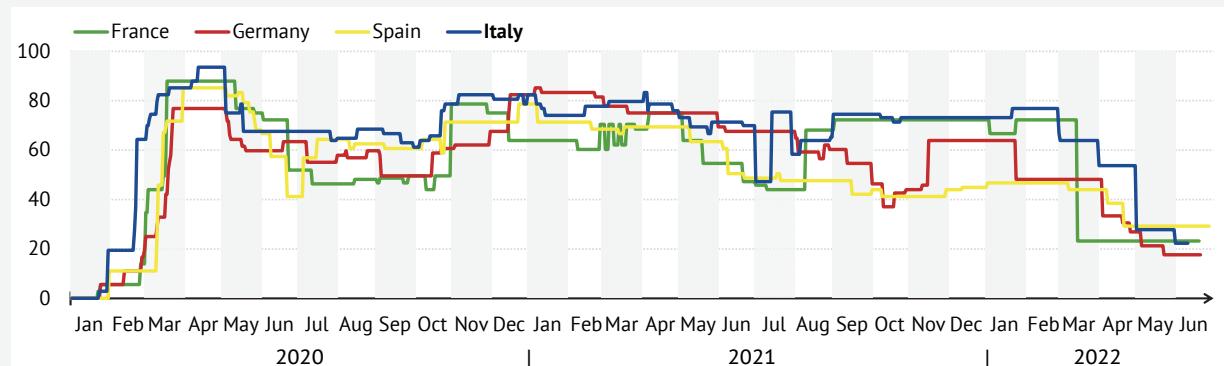
Source: Refinitiv Datastream and Istat. In the left figure retail investor Sentix Sentiment Indicator is reported.

**Fig. 1.6 – COVID-19 confirmed cases in the main euro area countries**  
(daily data up to 30 June 2022; cases per millions)



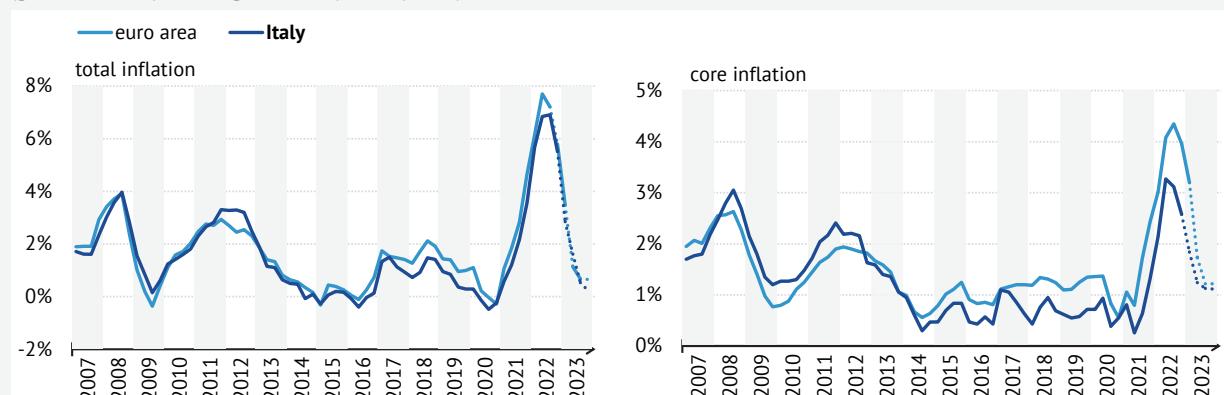
Source: Our World in Data within the Oxford Martin Programme on Global Development at the University of Oxford and in partnership with the Global Change Data Lab; <https://ourworldindata.org/covid-cases>.

**Fig. 1.7 – COVID-19 Government Response Stringency Index in the main euro area countries**  
(daily data up to 30 June 2022)



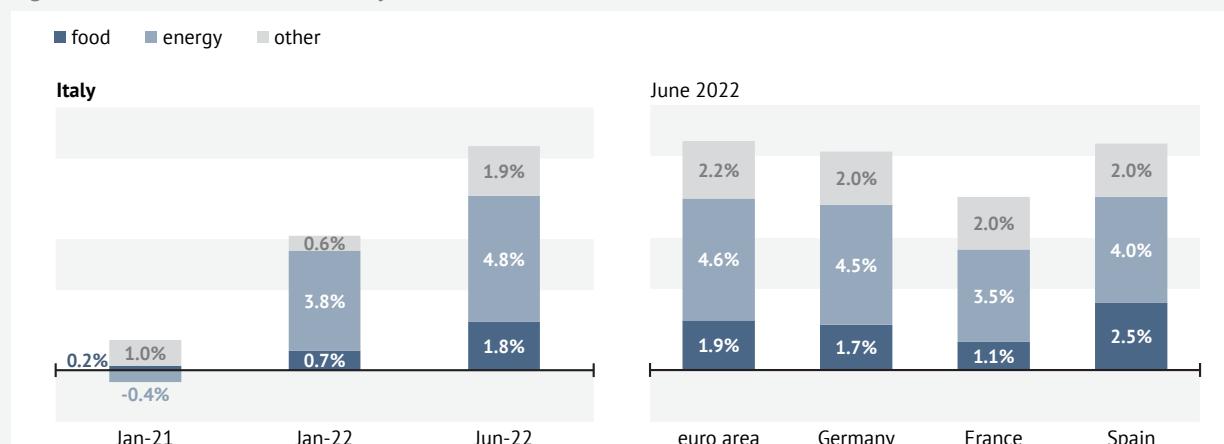
Source: Our World in Data within the Oxford Martin Programme on Global Development at the University of Oxford and in partnership with the Global Change Data Lab. <https://ourworldindata.org/grapher/covid-stringency-index>.

**Fig. 1.8 – Inflation rate in the euro area**  
(growth rate in percentage values; quarterly data)



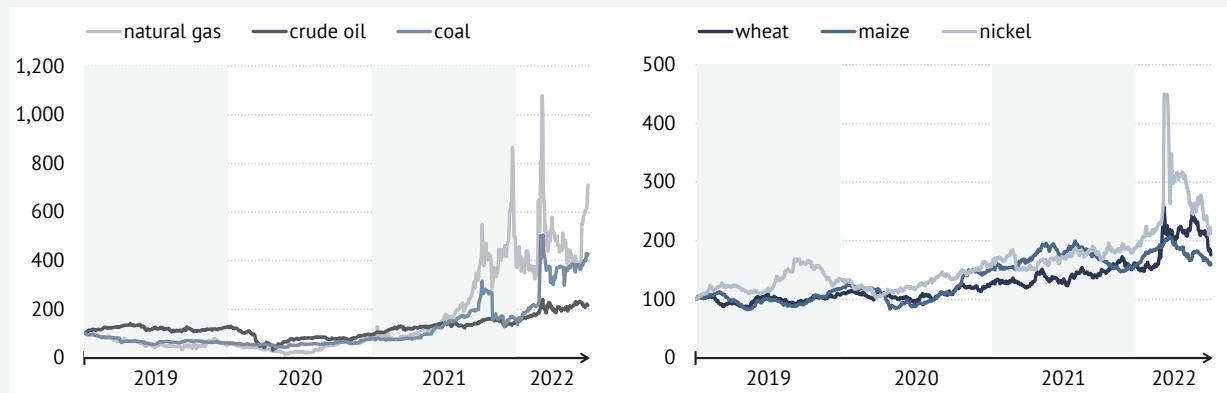
Source: Oxford Economics. Dot lines represent forecasts. Core inflation does not include food and energy.

**Fig. 1.9 – Drivers of inflation in Italy and in the main euro area countries**



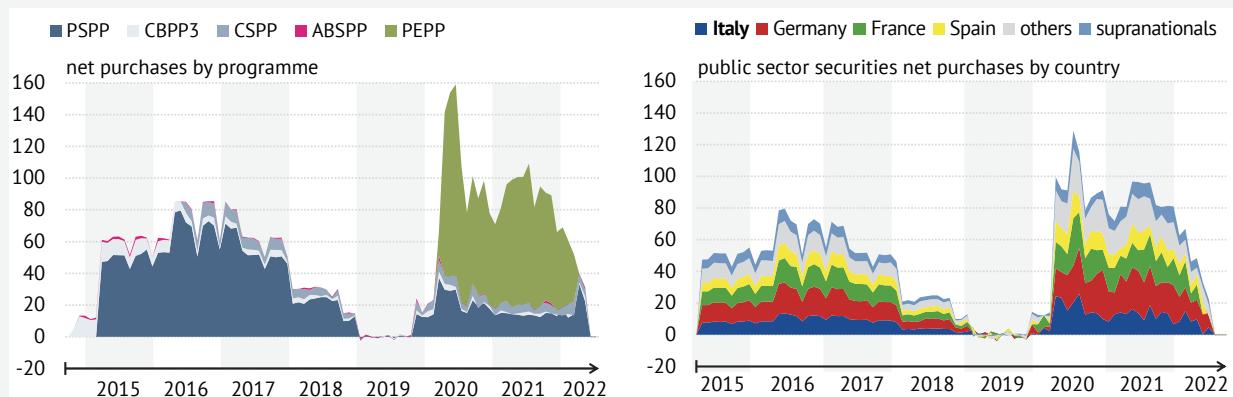
Source: calculations on Eurostat data. Food includes alcohol and tobacco. Figures for Spain refer to data as of May 2022.

**Fig. 1.10 – Trends in commodities prices**  
(daily data up to 30 June 2022; 1<sup>st</sup> January 2019=100)



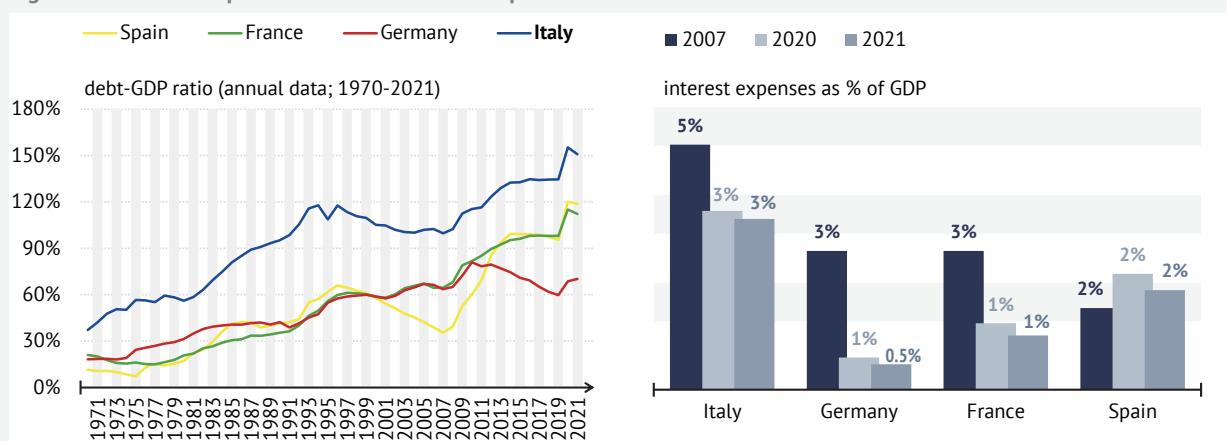
Source: Refinitiv Datastream.

**Fig. 1.11 – Net purchases of securities by the ECB**  
(monthly data up to May 2022; amounts in billions of euro)



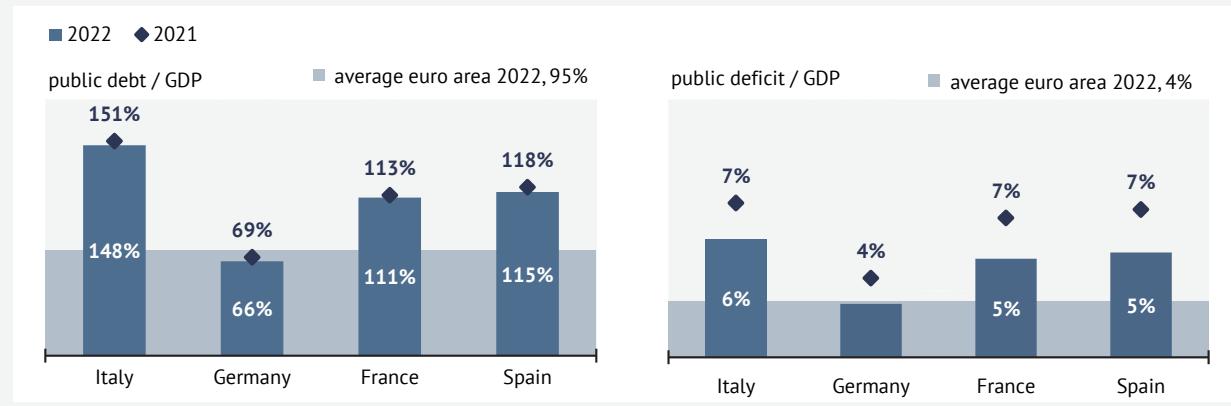
Source: ECB. Monthly net purchases of public sector securities through PEPP programme have been estimated based on bimonthly data.

**Fig. 1.12 – Trends in public debt and interest expenses in the main euro area countries**



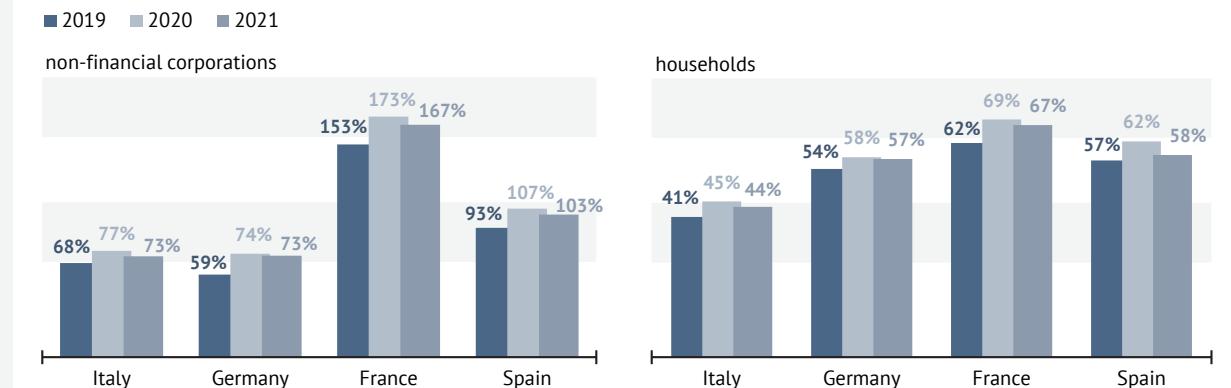
Source: IMF Fiscal Monitor April 2022, IMF Historical Public Debt Database and OECD Sovereign borrowing outlook May 2022.

**Fig. 1.13 – Public debt and deficit to GDP ratio in the main euro area countries**



Source: European Commission Economic Forecasts Spring 2022, May 2022.

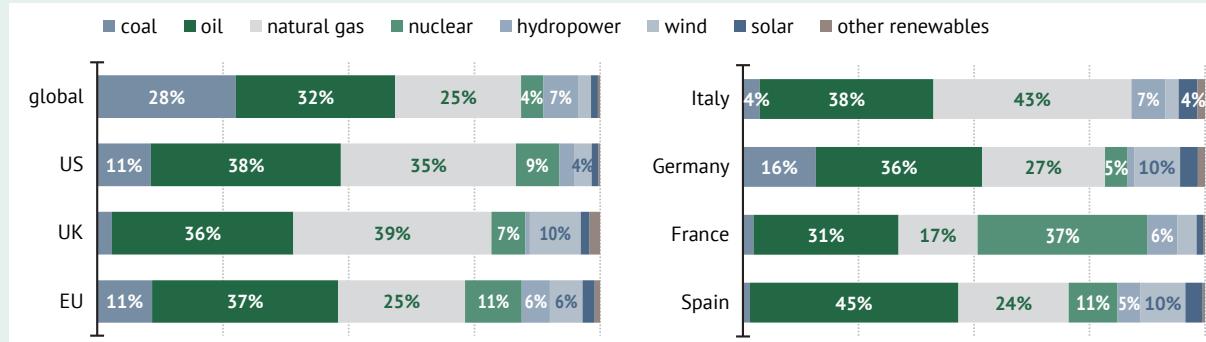
**Fig. 1.14 – Private debt to GDP ratio in the main euro area countries**



Source: Bank for the International Settlements.

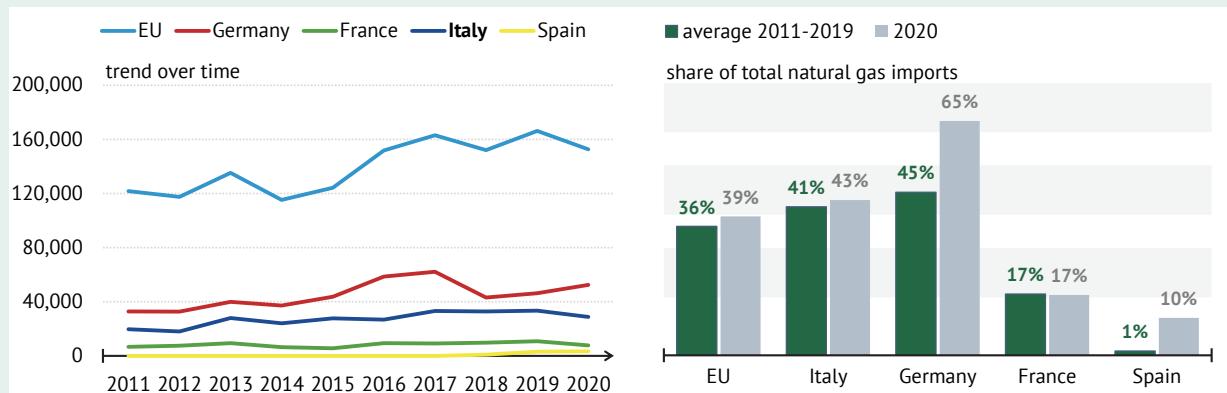
## ENERGY DEPENDENCE AND TRADE WITH RUSSIA

**Fig. 1.15 – Energy consumption by source in selected countries in 2020**  
(share on total consumption)



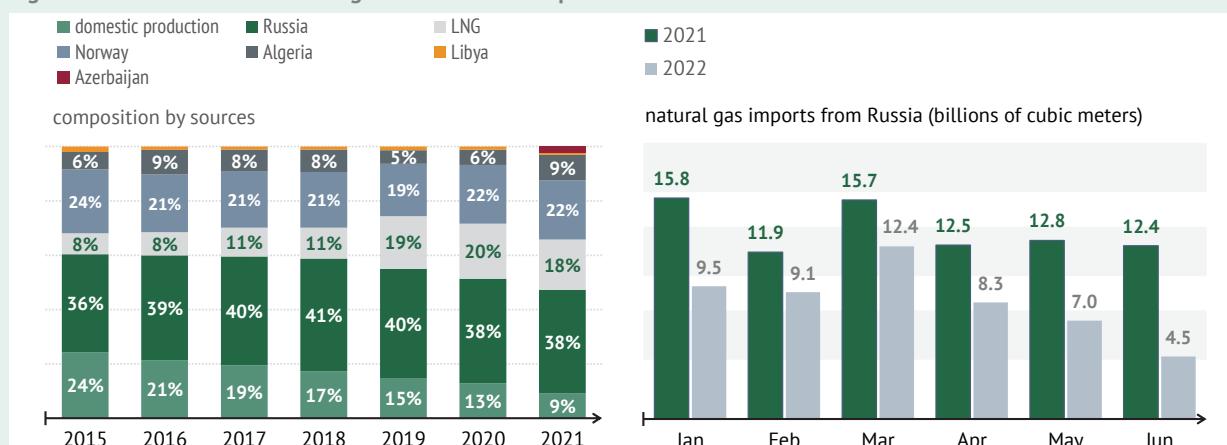
Source: Statistical Review of World Energy through OurWorldInData; <https://ourworldindata.org/energy>. Primary energy is calculated based on the 'substitution method' which takes account of the inefficiencies in fossil fuel production by converting non-fossil energy into the energy inputs required if they had the same conversion losses as fossil fuels.

**Fig. 1.16 – Natural gas imports from Russia**  
(annual data; values in million cubic meters)



Source: calculations on Eurostat data.

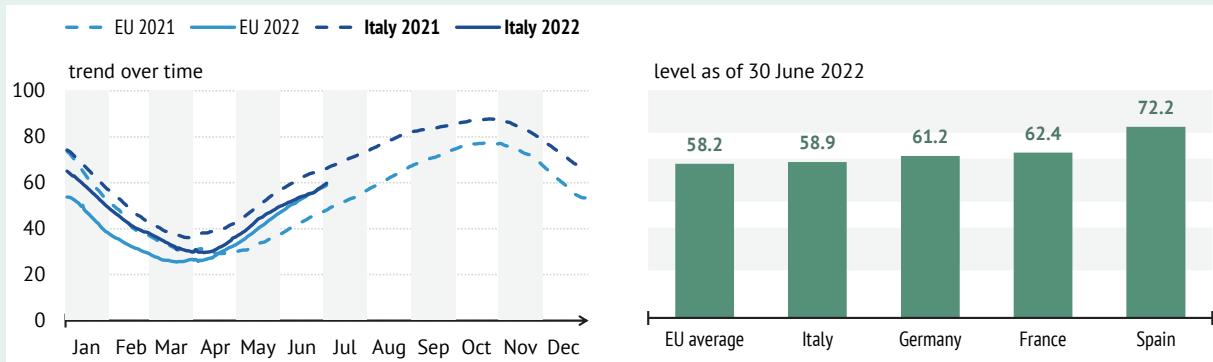
**Fig. 1.17 – EU sources of natural gas and volumes imported from Russia in 2021 and 2022**



Source: calculations on Bruegel data.

**Fig. 1.18 – Natural gas storage in the EU**

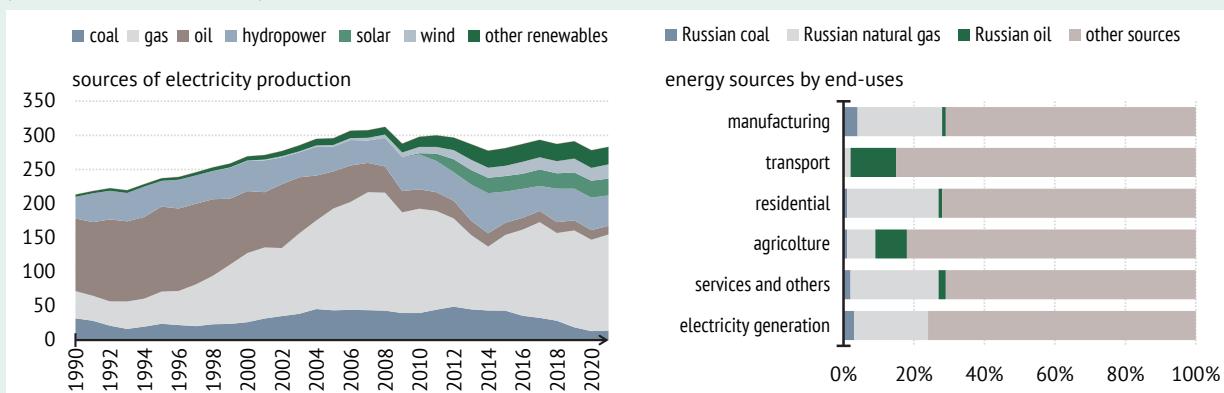
(share on total capacity)



Source: AGSI Aggregated Gas Storage Inventory; <https://agsi.gie.eu/#/>.

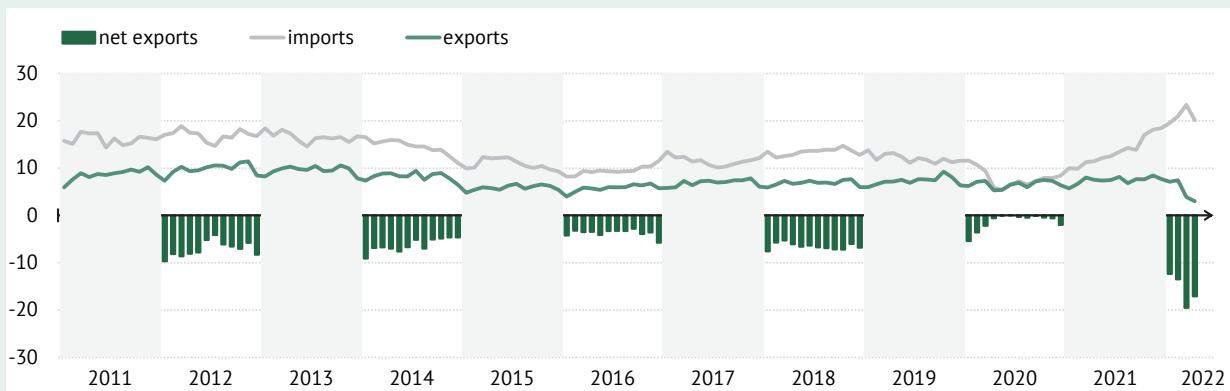
**Fig. 1.19 – Italian electricity production by source and reliance on Russian imports by sectorial end-uses**

(annual data; values in TWh)



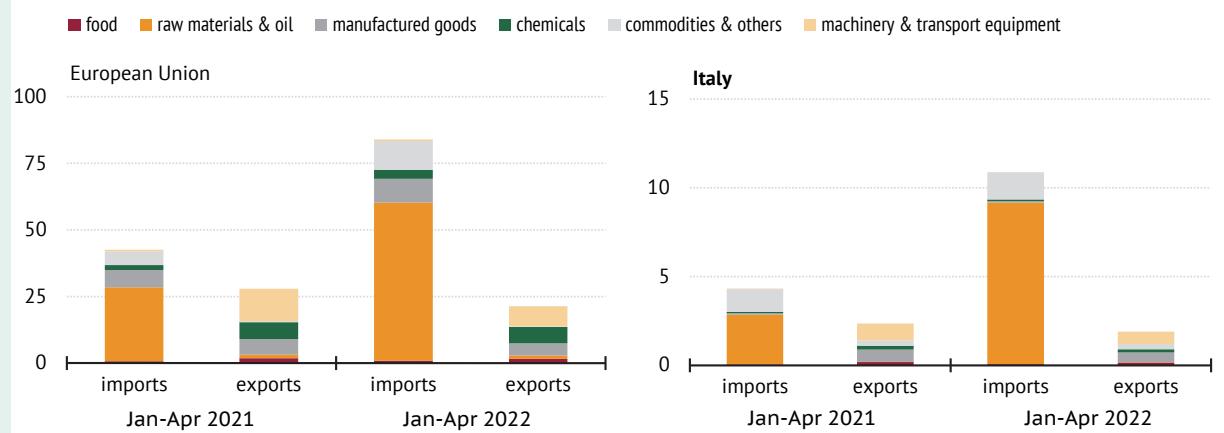
Source: BP Statistical Review of World Energy & Ember through OurWorld in Data and IEA statistics.

**Fig. 1.20 – Trade of EU with Russia over time**



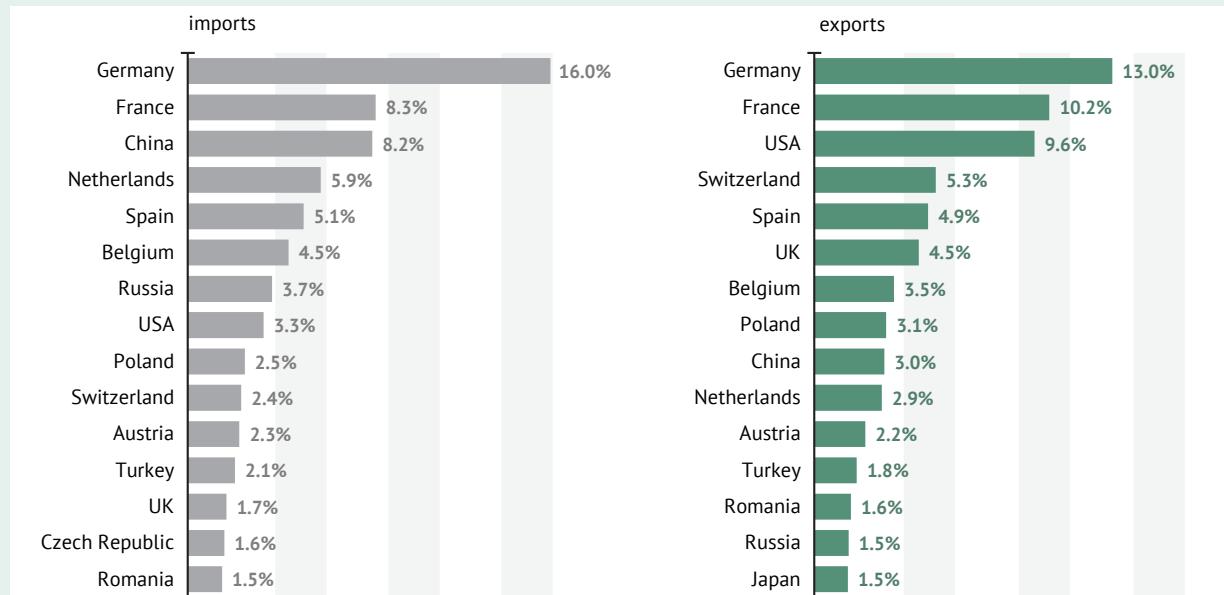
Source: Eurostat.

**Fig. 1.21 – Composition of imports and exports of EU and Italy with Russia**  
(amounts in billions of euro)



Source: calculations on Eurostat and ISTAT data.

**Fig. 1.22 – Italian main countries of imports and exports**  
(data as of April 2022)

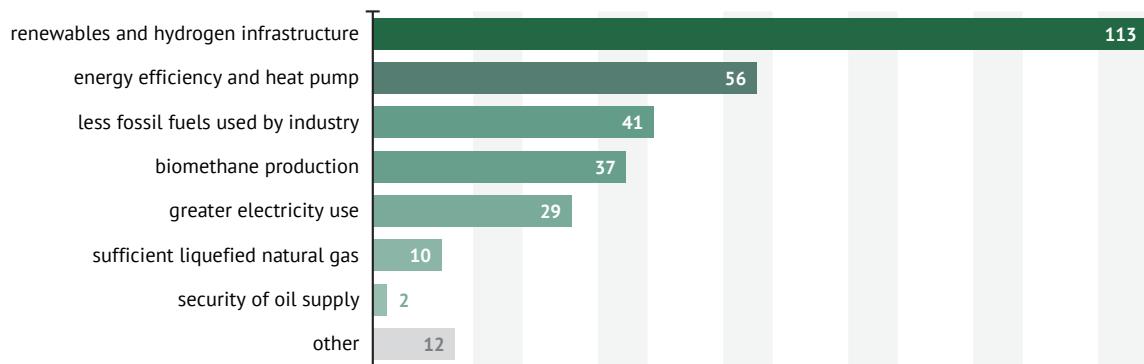


Source: ISTAT.

## EUROPEAN SUPPORT MEASURES AND NATIONAL PLANS

**Fig. 1.23 – REPowerEU: actions and additional investments**

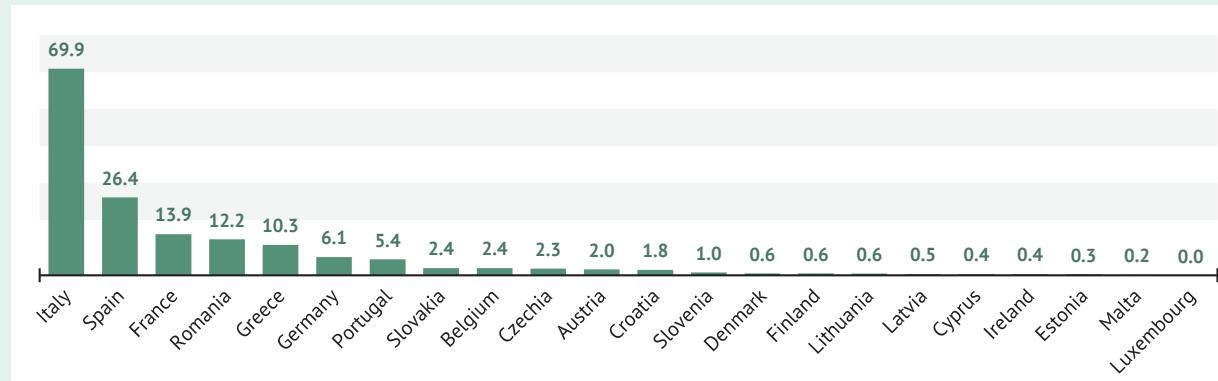
(billions of euro)



Source: <https://ec.europa.eu/commission/presscorner/api/files/attachment/872551/FS%20Financing%20REPowerEU.pdf>.

**Fig. 1.24 – NextGenerationEU green bonds eligible amount**

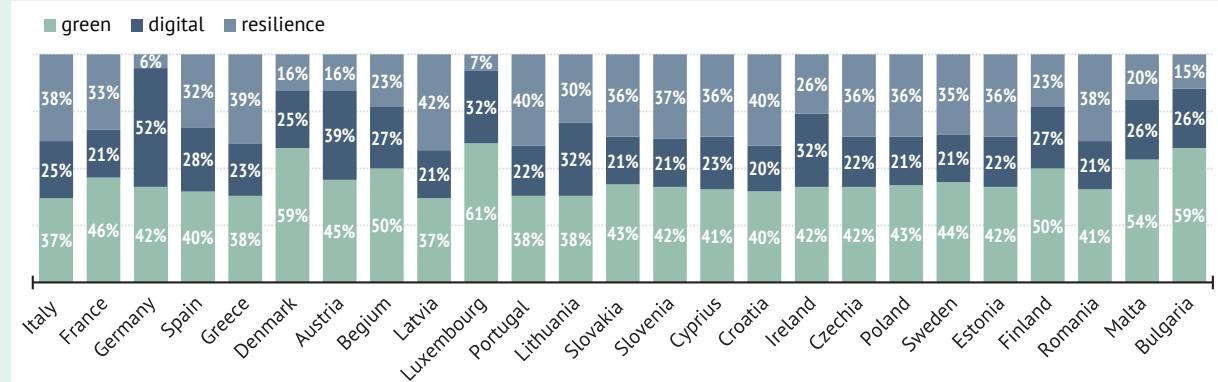
(billions of euro)



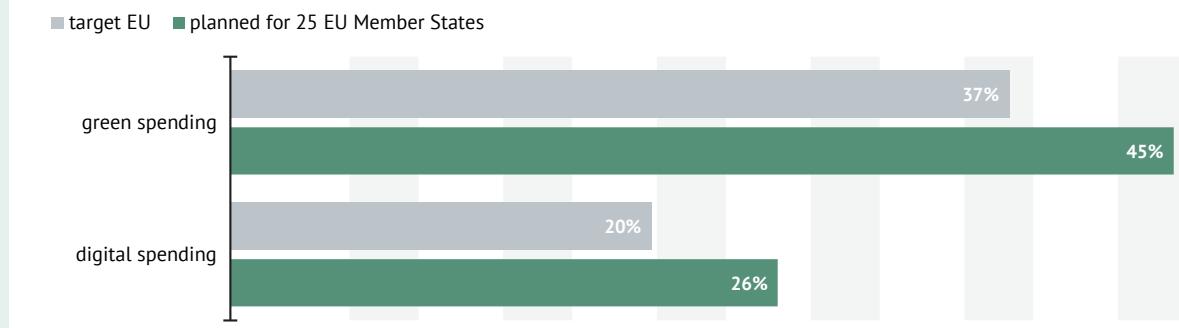
Source: [https://ec.europa.eu/info/strategy/eu-budget/eu-borrower-investor-relations/nextgenerationeu-green-bonds/dashboard\\_en](https://ec.europa.eu/info/strategy/eu-budget/eu-borrower-investor-relations/nextgenerationeu-green-bonds/dashboard_en). Expenditure in Member States' Recovery and Resilience Plans that is eligible for being included in the pool of NextGenerationEU green bonds financing

**Fig. 1.25 – Recovery and resiliency plans (RRPs) endorsed by the European commission**

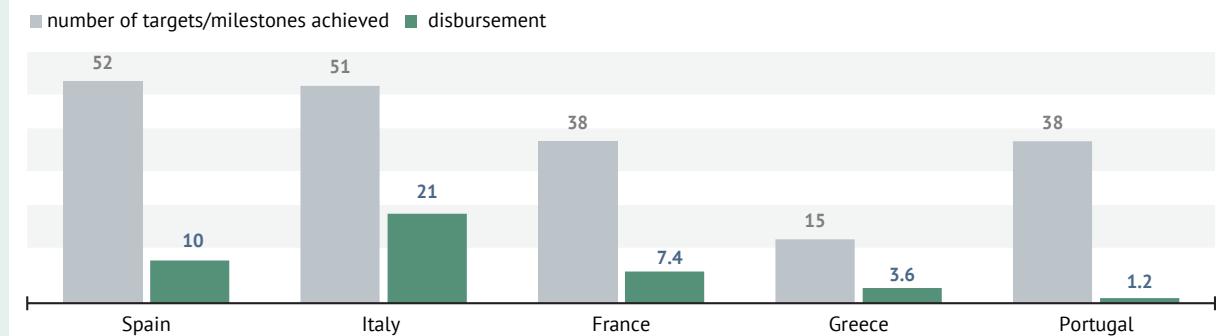
(distribution of total planned spending by green, digital and resilience components)



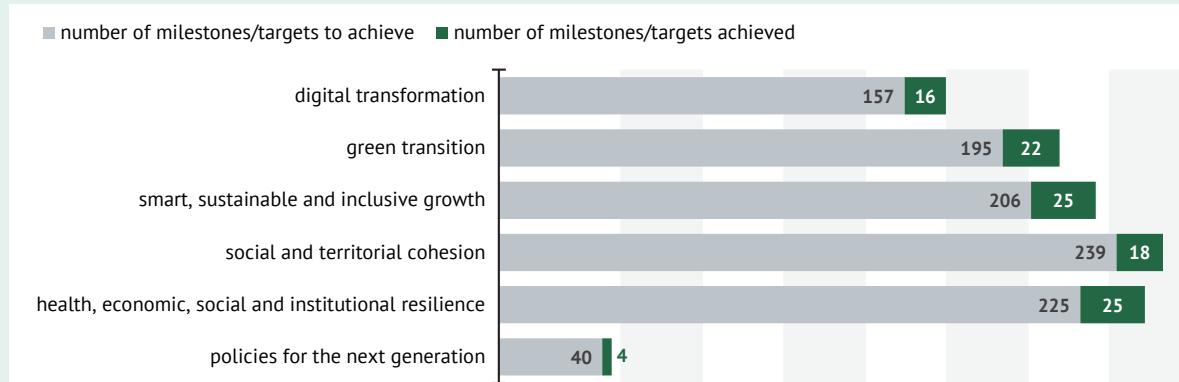
Source: [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en), retrieved 11 July 2022. Resilience (economic and social) includes, for example, investment in social and territorial cohesion, labour market policies, healthcare sector, public administration, productivity and competitiveness, policies for the next generation, education and skills.

**Fig. 1.26 – Twin transitions: climate neutrality and digital transitions**

Source: [https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility\\_en](https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en), retrieved 11 July 2022.

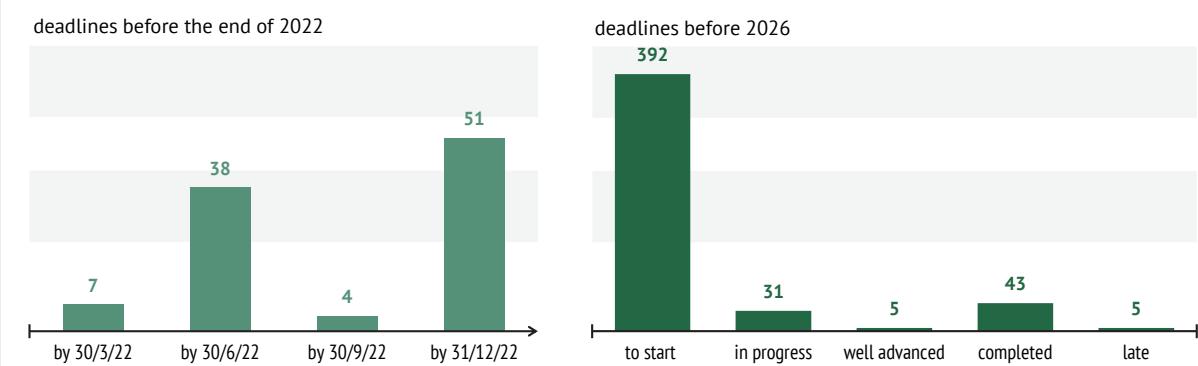
**Fig. 1.27 – RRF Commission's disbursements (1st payment) per Member State (billions of euro)**

Source: [https://ec.europa.eu/economy\\_finance/recovery-and-resilience-scoreboard](https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard), retrieved 30/06/2022. Under the RRF, two types of disbursements can take place. The pre-financings are granted upon request of the Member States. They are paid just after the recovery and resilience plans have been endorsed, are limited to plans endorsed in 2021, and should not exceed 13% of the overall allocation to the Member State. All further disbursements (payment) are made upon request of the Member State and conditional on a positive assessment by the Commission as to the satisfactory fulfilment of a set of relevant milestones and targets.

**Fig. 1.28 – Italy Policy Pillars: milestones and targets achieved**

Source: calculations on EU Recovery and Resilience scoreboard data, [https://ec.europa.eu/economy\\_finance/recovery-and-resilience-scoreboard](https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard), 15/12/2021. This graph displays the share of satisfactorily fulfilled milestones and targets. A milestone or target is fulfilled once a Member State has provided the evidence to the Commission by submitting a payment request (maximum twice a year) that it has completed the milestone or target in a satisfactory manner and the Commission has assessed it positively in an implementing decision. The number of Italian milestones/targets is 527. In the representation of the data, due to overlaps between the different policy pillars, the total number of milestones/targets is greater than 527.

Fig. 1.29 – Italian PNRR deadlines



Source: <https://openpnrr.it/>, the data refers to European deadlines. retrieved 11 July 2022.



# Mercati azionari

# Equity markets



Andamento dei corsi azionari

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Volatilità e liquidità

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Multipli di borsa

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Indicatori di interconnessione tra mercati

---

Equity markets trends

---

Volatility and liquidity

---

Multiples

---

Connectedness among stock markets

---

● Nel primo semestre 2022, i corsi azionari delle principali economie avanzate hanno registrato un calo in conseguenza del peggioramento del quadro macroeconomico legato anche all'invasione dell'Ucraina. L'EuroStoxx50 nell'area euro e lo S&P500 negli USA hanno subito una perdita di 20 punti percentuali circa, mentre il Ftse100 nel Regno Unito ha registrato una contrazione più ridotta e pari a 3 punti percentuali circa. Nelle economie emergenti le flessioni dei corsi azionari oscillano, nel periodo in esame, tra il 7% circa dell'indice Shanghai SE e il 42% dell'indice Moex. In tutti i mercati considerati la volatilità è aumentata in misura significativa, anche se nei paesi avanzati si è mantenuta su livelli più contenuti rispetto a episodi di crisi precedenti (ad esempio, rispetto ai picchi registrati in occasione del fallimento Lehman e dello scoppio della pandemia; Fig. 2.1 – Fig. 2.2).

● Per quanto riguarda il mercato italiano, nel primo semestre 2022 il Ftse Mib ha sperimentato un calo di 22 punti percentuali, superiore a quello rilevato per il Dax30 (-20%), il Cac40 (-17%) e l'Ibex35 (-7%). Analoghi andamenti sono stati registrati per gli indici *small cap*, che nello stesso periodo hanno subito una flessione di 19 punti percentuali in Italia e di 25 punti percentuali in Germania. Nel mercato domestico la contrazione dei corsi è stata disomogenea tra settori, risultando più intensa nei comparti tecnologico (-30%), bancario (-21%), manifatturiero (-18%) e significativamente più contenuta in quello energetico (-2%; Fig. 2.3 – Fig. 2.5).

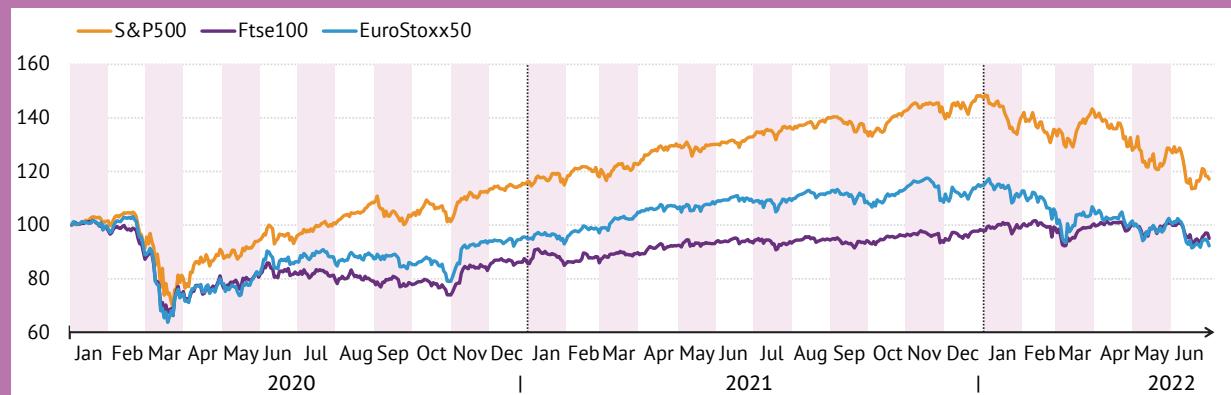
● In the first half of 2022, in the major advanced economies stock prices declined as a result of the worsening macroeconomic environment also linked to the invasion of Ukraine. The EuroStoxx50 in the euro area and the S&P500 in the US suffered a loss of about 20 percentage points, while the Ftse100 in the UK experienced a smaller decline of about 3 percentage points. Over the same time period, in emerging economies drops in stock prices ranged from about 7% in the Shanghai SE index to 42% in the Moex index. In all markets considered, volatility increased significantly, although in the advanced countries it remained below the peaks recorded in previous crisis episodes (e.g., the default of Lehman and during the pandemic outbreak; Fig. 2.1 – Fig. 2.2).

● As for Italian market, in the first half of 2022 Ftse Mib experienced a decrease by 22 percentage points, greater than that recorded by Dax30 (-20%), Cac40 (-17 %) and Ibex35 (-7%). Similar trends were exhibited by small cap indices, which fell by 19 percentage points in Italy and 25 percentage points in Germany. In the domestic stock market, price declines were uneven across sectors, being most pronounced in the technology (-30%), banking (-21%), and manufacturing (-18%) sectors and significantly smaller in the energy sector (-2%; Fig. 2.3 – Fig. 2.5).

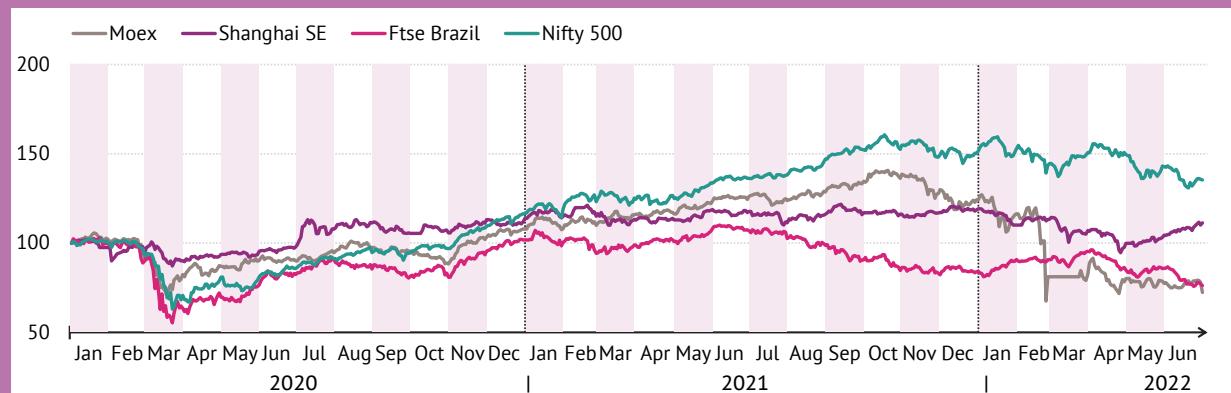
## STOCK INDEX PRICES

(daily data up to 30 June 2022; 1st January 2020=100)

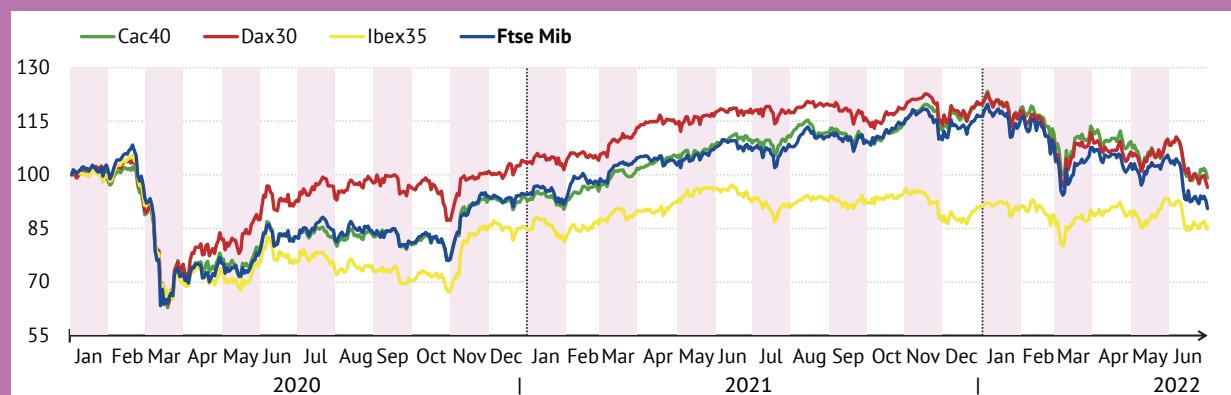
### Main advanced economies



### Main emerging countries



### Main euro area countries



Source: Refinitiv Datastream.

- La flessione dei corsi azionari si è affiancata a un deterioramento della liquidità delle maggiori società quotate, anche se in modo meno intenso rispetto a precedenti periodi di crisi (Fig. 2.6).
- Nonostante la congiuntura negativa dei mercati azionari, nell'area euro le aspettative sull'andamento degli utili societari su un orizzonte di 12 mesi continuano a mostrare un trend in crescita rispetto al minimo registrato nel 2020, soprattutto per le imprese non finanziarie. Emergono inoltre segnali di riduzione del divario tra valutazioni di mercato e valori fondamentali delle società quotate riscontrato nel corso del 2021, a fronte sia della dinamica nettamente decrescente del *price-earnings ratio* aggiustato per il ciclo economico sia di indicatori di disallineamento elaborati sulla base del *dividend discount model* (Fig. 2.7 – Fig. 2.11).
- Nel primo semestre del 2022, nell'area euro si è attenuato il rischio di una reazione simultanea e sistemica dei corsi azionari dei mercati domestici a shocks esogeni comuni, riflettendo verosimilmente le differenze strutturali tra le economie sottostanti anche in termini di esposizione agli shock stessi<sup>1</sup> (Fig. 2.12).
- The downturn in stock prices was accompanied by a deterioration in the liquidity of the largest listed companies, although less severe than in previous crisis periods (Fig. 2.6).
- Despite the adverse trend in equity markets, in the euro area expected forward earnings over a 12-month horizon continue to tilt upward from the lowest hit in 2020, especially for non-financial firms. Compared to 2021, signals of a narrowing gap between market valuations and fundamental values of listed companies can also be detected, as shown by the sharply decrease both in the cyclically adjusted price-earnings ratio and in misalignment indicators developed on the basis of the dividend discount model (Fig. 2.7 – Fig. 2.11).
- The first half of 2022 recorded a decline in the risk of a simultaneous, systemic reaction to common exogenous shocks of equity prices in the euro area domestic markets, likely reflecting structural differences among the underlying economies also in terms of exposure to the shocks themselves (Fig. 2.12).

<sup>1</sup> Il grado di interconnessione tra i mercati azionari europei è stato stimato distinguendo i paesi denominati *core* dai paesi cosiddetti periferici, dove il primo gruppo comprende le economie caratterizzate da condizioni di crescita e di finanza pubblica relativamente migliori rispetto a quelle del secondo gruppo. In condizioni normali, i paesi periferici sono esposti soprattutto a fattori idiosincratici e presentano, dunque, un livello di interconnessione più basso di quello stimabile per il gruppo *core*. In condizioni di crisi, tuttavia, la presenza di uno shock comune tende a ridurre il divario nel grado di interconnessione registrato per entrambi i gruppi di paesi.

- Aumenta invece il rischio di contagio a livello globale, come evidenziato dall'andamento di due indicatori che stimano, rispettivamente, il grado di interconnessione di lungo periodo fra le quotazioni azionarie di diversi mercati e la propagazione di volatilità da un mercato a un altro (*volatility spillover index*)<sup>2</sup>. Entrambi gli indicatori sono in crescita soprattutto nel settore bancario e, in particolare, in quello italiano, che sembra contribuire ad alimentare il rischio di contagio trasmettendo volatilità agli altri mercati (Fig. 2.13 – Fig. 2.14).
- On the other hand, the risk of contagion is growing at the global level, as highlighted by the pattern of two indicators estimating, respectively, the degree of long-term interconnectedness among the stock prices across different markets and the propagation of volatility from one market to another. Both indicators are on the rise especially in the banking sector and, in particular, in the Italian sector, which seems to contribute to the risk of contagion by spilling over volatility to other markets (Fig. 2.13 – Fig. 2.14).

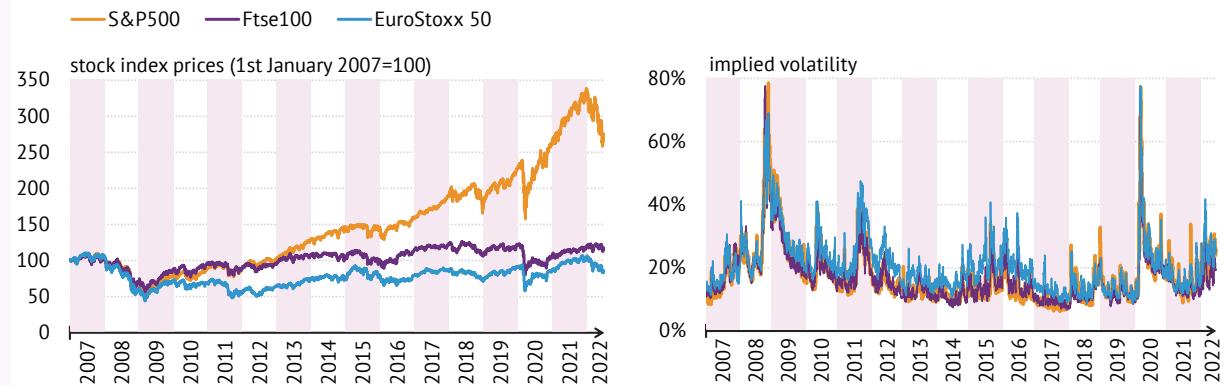
<sup>2</sup> Tale indicatore consente di misurare il contagio sulla base dei contributi apportati da ogni singolo mercato alla volatilità complessiva, al netto di fattori idiosincratici riferibili agli altri mercati considerati. Sulla base di tale metodologia è possibile individuare sia la trasmissione di shock da un mercato a un altro sia la direzione del contagio.

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**Fig. 2.1 – Equity markets trends in the main advanced economies**

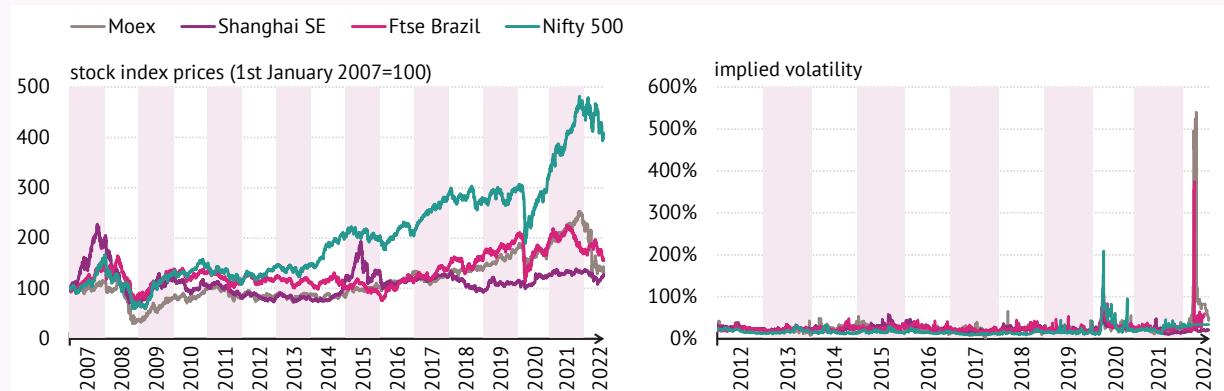
(daily data up to 30 June 2022)



Source: Refinitiv Datastream.

**Fig. 2.2 – Equity markets trends in the main emerging countries**

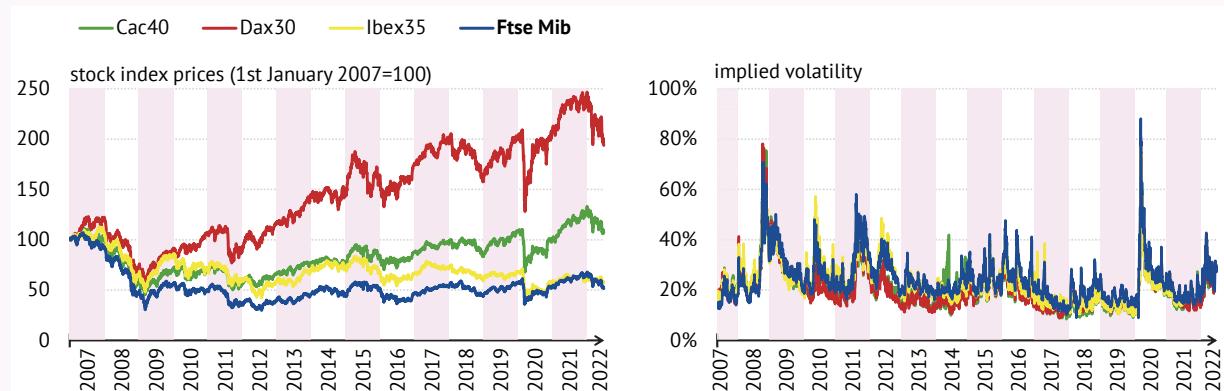
(daily data up to 30 June 2022)



Source: Refinitiv Datastream. Figure on the right reports the Cboe stock volatility index as for China.

**Fig. 2.3 – Equity markets trends in the main euro area countries**

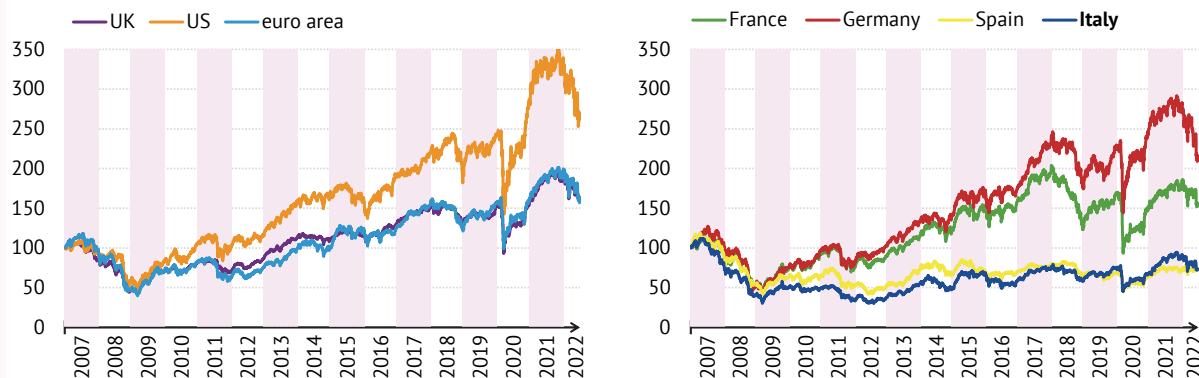
(daily data up to 30 June 2022)



Source: Refinitiv Datastream.

**Fig. 2.4 – Small cap equity markets trends in the main advanced countries**

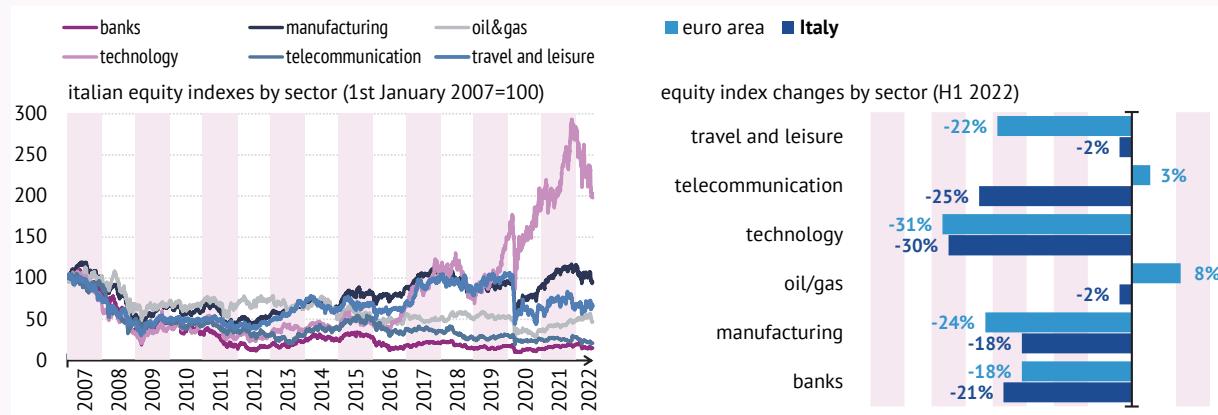
(daily data up to 30 June 2022; 1st January 2007=100)



Source: Refinitiv Datastream.

**Fig. 2.5 – Equity markets trends in the euro area by sector**

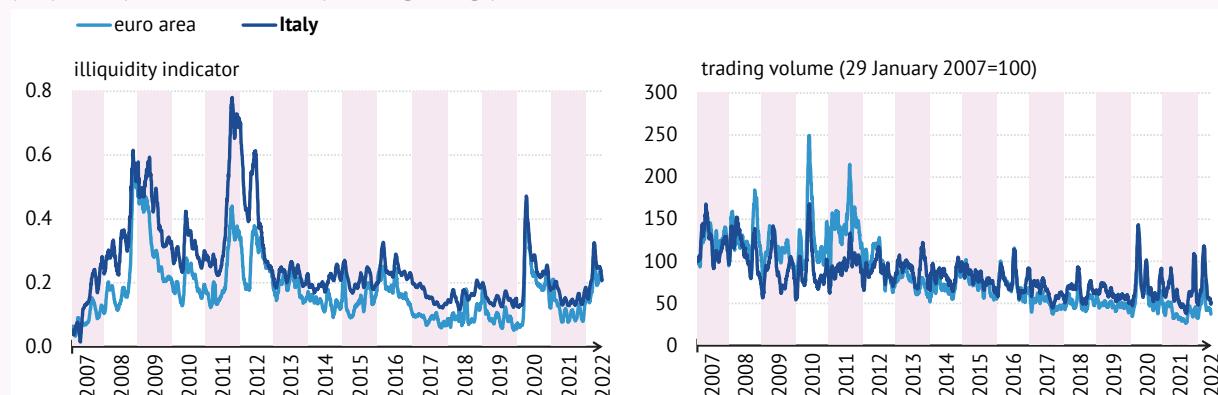
(daily data up to June 2022)



Source: calculations on Refinitiv Datastream data (Ftse Italy All Shares and EuroStoxx indexes).

**Fig. 2.6 – Equity market illiquidity indicator and turnover in the euro area**

(daily data up to June 2022; 20-days moving average)



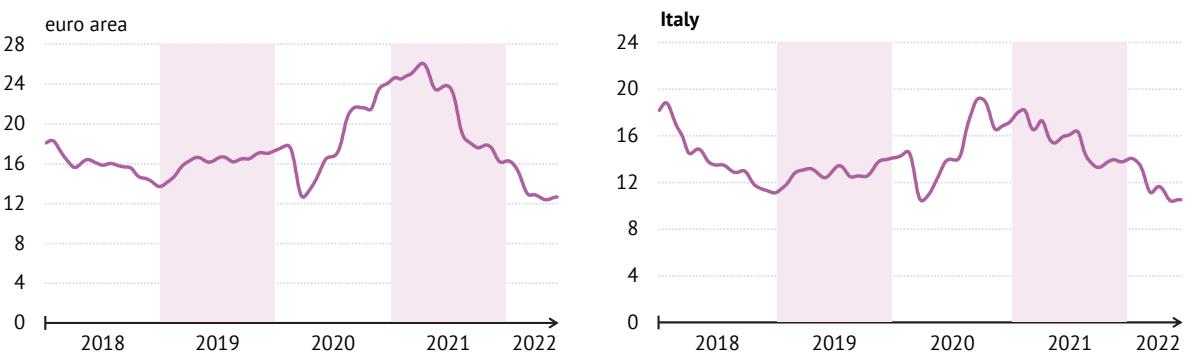
Source: calculations on Refinitiv Datastream data. In the figure on the left-hand side an increase (decrease) of the indicator signals a deterioration (improvement) in liquidity conditions. The illiquidity index is computed as the first principal component of 4 sub-indicators: 1) range-based volatility index, that is the difference between maximum and minimum price during the trading day; 2) bid-ask spread; 3) Amihud indicator, that is the ratio of absolute value of the return to turnover; 4) implied volatility. The illiquidity indicator is normalized between 0 (= minimum) and 1 (=maximum) and is computed on EuroStoxx50 (euro area) and Ftse Mib (Italy) constituent lists.

**Fig. 2.7 – Expected 12-month forward earnings per share in the euro area**  
(monthly data up to June 2022; January 2007=100)



Source: Refinitiv Datastream. Analyses refer to EuroStoxx50, Ftse Italy and Refinitiv Datastream banks and non-financial stock indexes.

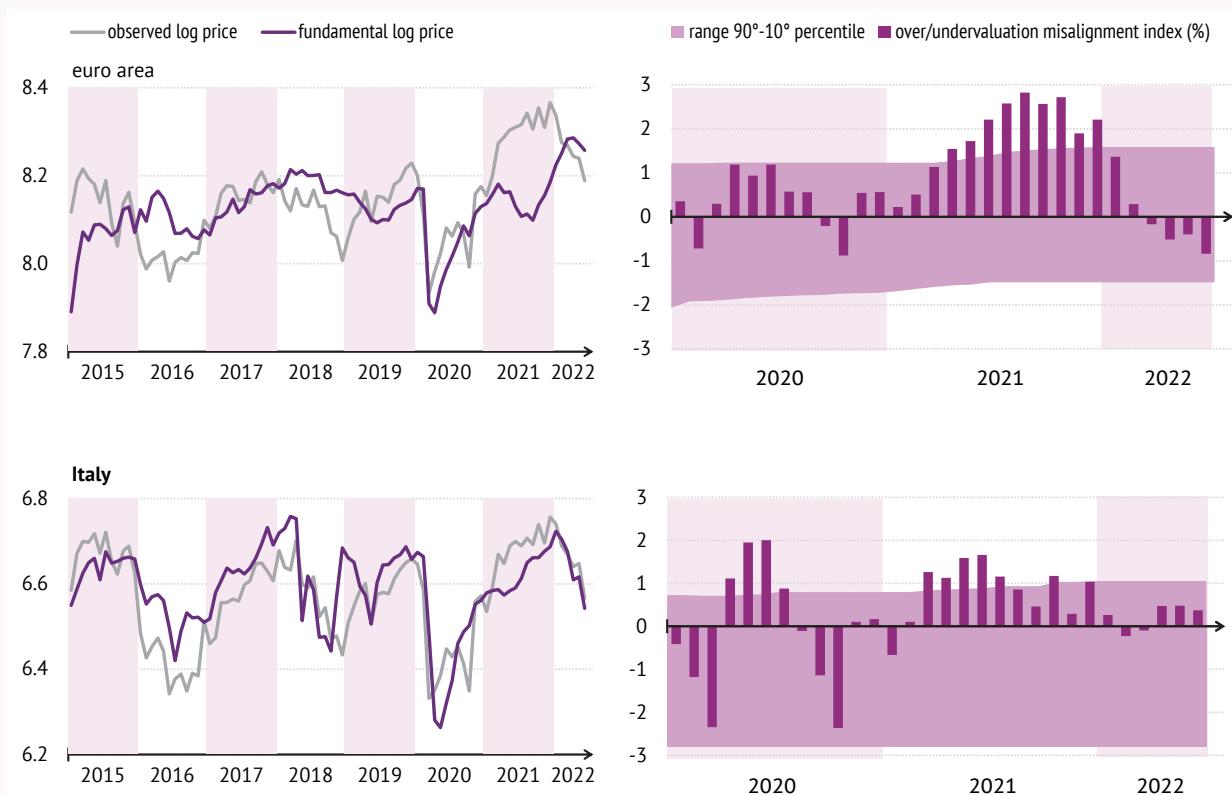
**Fig. 2.8 – Cyclically-adjusted price-earnings ratios in the euro area**  
(daily data up to June 2022)



Source: calculations on Refinitiv Datastream data. The cyclically-adjusted price-earnings ratio is computed by applying Hodrick-Prescott filter. In the computations Datastream indexes are taken into consideration.

**Fig. 2.9 – Over/undervaluation misalignment index in the euro area**

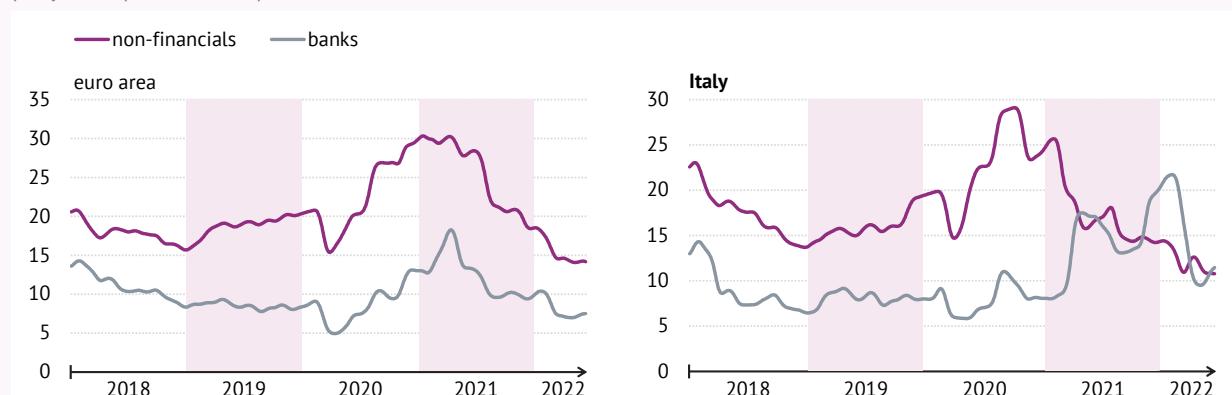
(monthly data up to June 2022)



Source: calculations on Refinitiv Datastream data. Fundamental value estimation is based on Dividend Discount Model. For methodological details see the technical note on asset valuation models in Global Financial Stability Report (GFSR; IMF, 2019). The model illustrated in the GFSR aims to provide a direct measure of misalignment based on economic and corporate fundamentals. In the applied dividend discount model, expected earnings are proxied by the average (across analysts) forecasts of earnings over the next 18 months (IBES Refinitiv). The equity risk premium is proxied by the standard deviation (across analysts) of earnings forecasts over the next 18 months (IBES Refinitiv). The term spread is calculated as the difference between long-term (30-year) and short-term (3-month) government bond yields (see SUERF Policy Note Issue No 209, November 2020). The applied model is recursively estimated with a 4-year rolling window by using monthly data starting from January 2000. In the right figure, misalignment index is estimated as the percentage difference between log observed price and log fundamental value; percentiles are recursively calculated on misalignment index time series with a 6-year rolling windows. The analysis refers to EuroStoxx50 and MSCI Italy index.

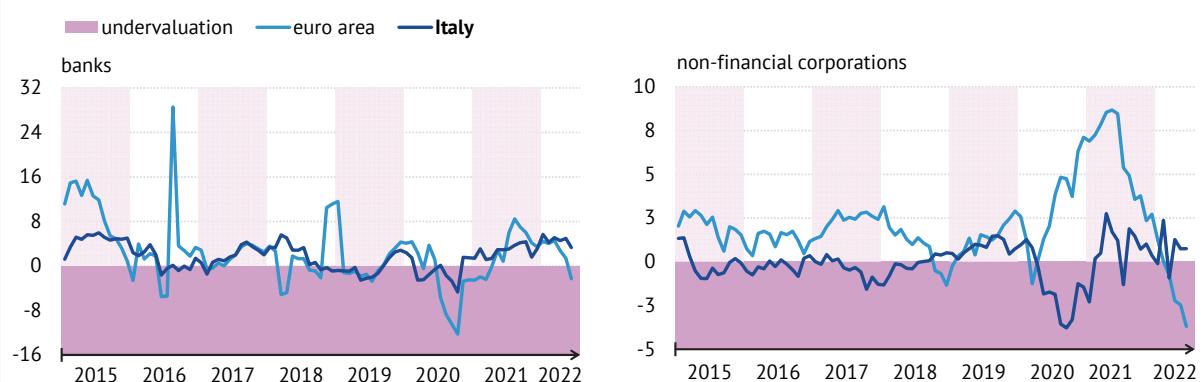
**Fig. 2.10 – Cyclically-adjusted price-earnings ratios in the euro area by sector**

(daily data up to June 2022)



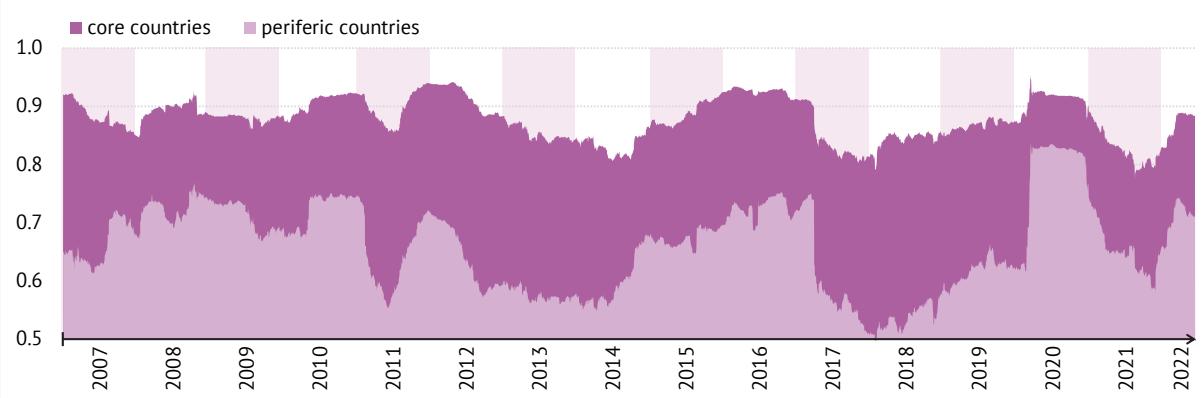
Source: calculations on Refinitiv Datastream data. The cyclically-adjusted price-earnings ratio is computed by applying Hodrick-Prescott filter. In the computations Datastream sectoral indexes are taken into consideration.

**Fig. 2.11 – Price misalignment with respect to fundamental values in the euro area by sector**  
 (daily data up to June 2022; percentage values)



Source: calculations on Refinitiv Datastream data. The *over/undervaluation* index is the percentage difference between stock price and fundamental value, estimated, on the basis of the dividend discount model, by applying a VECM cointegration model on stock prices, earning per share adjusted for the business cycle and risk-premium (Campbell and Shiller, 1988; Nelson, 1999; De Bondt et al., 2010). Positive (negative) values signal overvaluation (undervaluation) respect to fundamental values. Price indexes taken into consideration are respectively EMU and Italy banks/ non-financial corporations stock indexes.

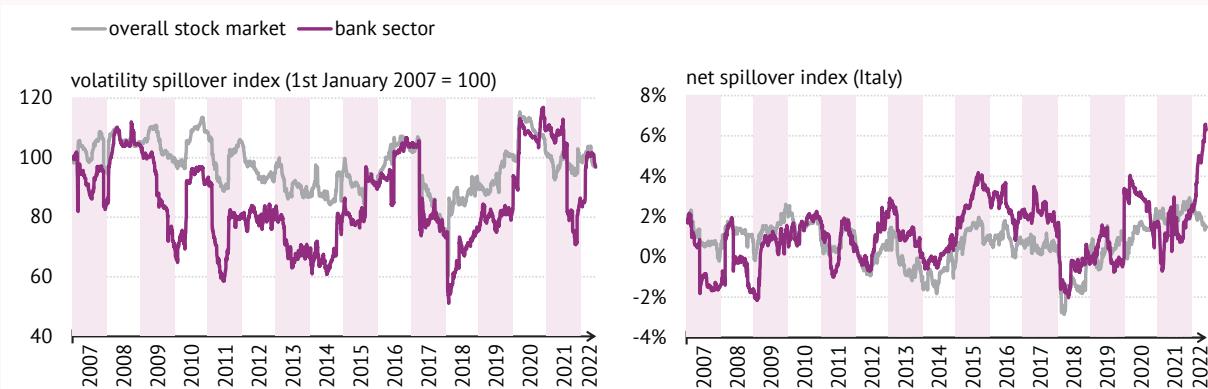
**Fig. 2.12 – Stock market sensitivity to common shocks in the euro area**  
 (daily data up to June 2022; percentage values)



Source: calculations on Refinitiv Datastream data. We measure the degree of exposure to common shocks as the average R<sup>2</sup> referring to the following regression  $return_{index_{i,t}} = \alpha_{i,t} + \beta_{i,t}\theta_t + \varepsilon_{i,t}$ , where  $\beta_{i,t}$  is the regression coefficient on the first principal component  $\theta_t$  for the stock market  $i$  in the day  $t$ . Regressions are applied recursively with a 200 observation *rolling window* (ECB - Financial integration in Europe, 2014). We represent the average R<sup>2</sup> respectively in the group of core countries (Dax30, Cac40, Aex Index, Bel20 Index) and in the group of the so-called peripheral countries (Ftse Mib, Ibex35, Iseq 20 Index, Portugal PSI20 index, Ftse Athex Index). In the computation of the principal component analysis S&P500 and Ftse100 indexes are taken into consideration as well.

**Fig. 2.13 – Global volatility spillover index**

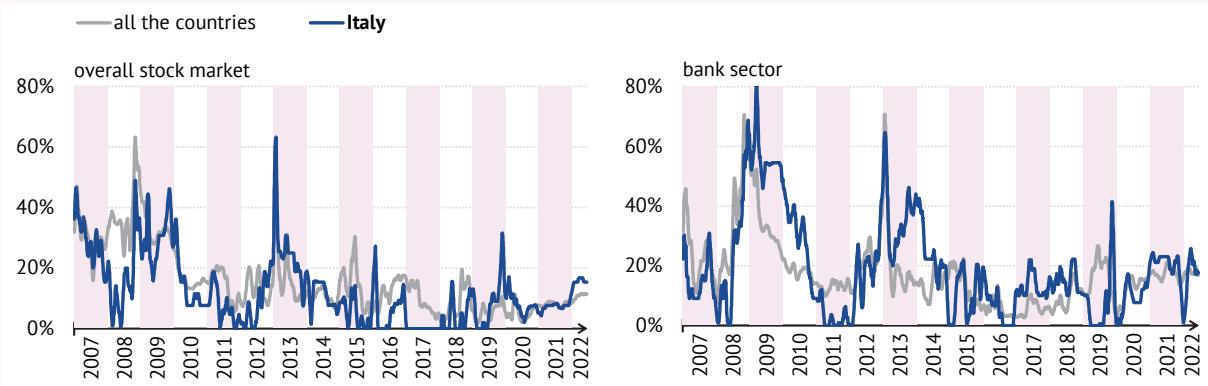
(daily data up to June 2022)



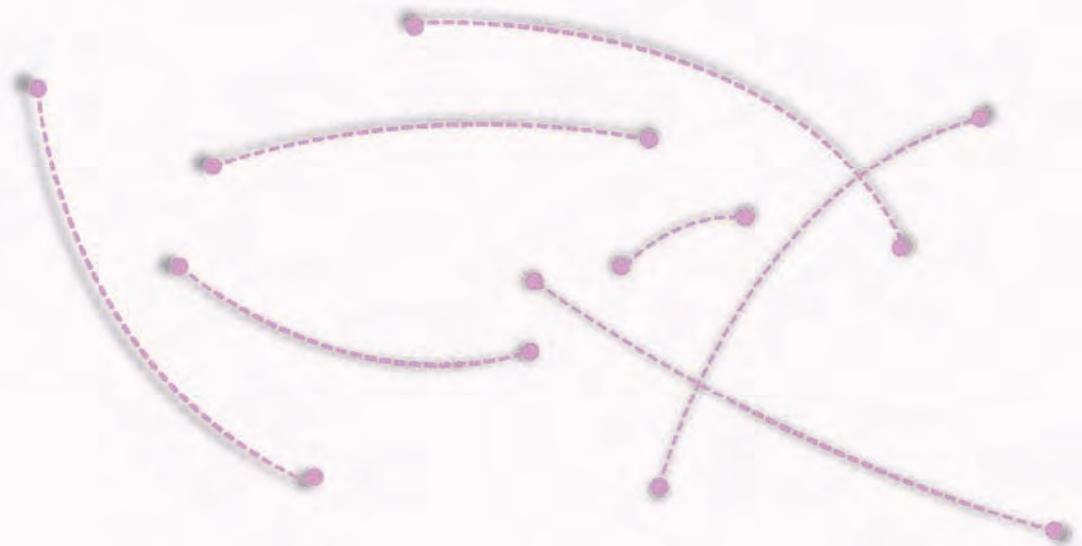
Source: calculations on Refinitiv Datastream data. In the left figure overall stock market analysis is carried on S&P500, Ftse100, Ftse Mib, Dax30, Cac40, Ibex35, Aex Index, Bel20 Index, Iseq 20 Index, Portugal PSI20 index, Ftse Athex Index, Shanghai SE, Moex and Swiss Market Index; bank sector analysis is carried on Ftse UK banks, Ftse Germany banks, Ftse France banks, Ftse Italy banks, Ftse Spain banks, Ftse Greece banks, Ftse Ireland banks, Ftse Netherlands banks, Ftse Belgium banks, Ftse Switzerland banks, Ftse S&P500 banks, Portugal Datastream index banks, China Datastream bank index, Russia Datastream bank index. In the right figure net spillover index (reported only for Italy) positive (negative) values signal that Italian stock market tend to transmit (receive) volatility shocks to (from) other markets. For methodological details see Diebold and Yilmaz (2009, 2012 and 2014).

**Fig. 2.14 – Global degree of interconnection among stock markets**

(daily data up to June 2022; 2-months moving average)



Source: calculations on Refinitiv Datastream data. The contagion indicator measures the degree of interconnectedness among stock markets estimated by applying VECM models on return time series. See note on Fig. 2.14 for reference to country stock indexes. For methodological details see CONSOB Working paper no. 72, 2012.



# Mercati obbligazionari

## Bond markets



Mercati secondari di titoli di debito pubblici e privati

Volatilità e liquidità del mercato dei titoli pubblici

Emissioni di titoli di debito pubblici e privati

Secondary markets for public and private bonds

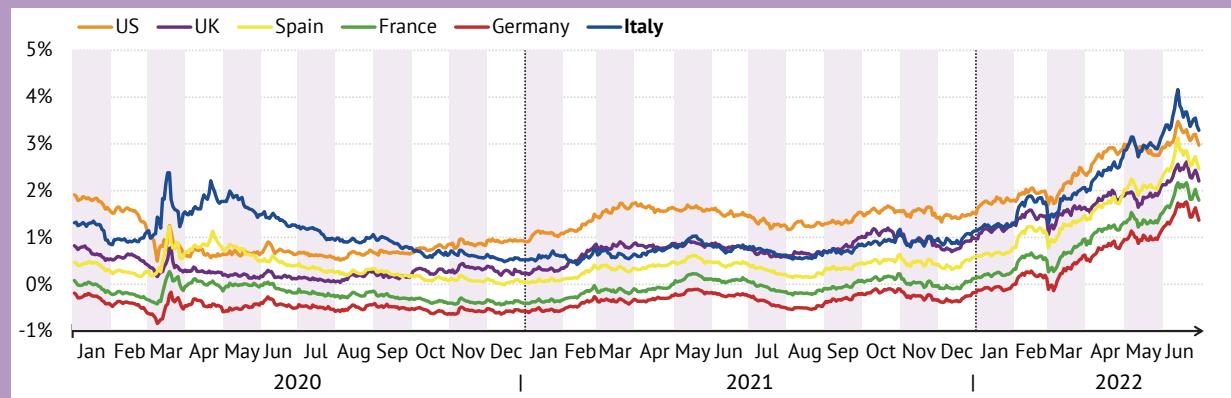
Volatility and liquidity of sovereign bonds markets

Issuances of public and private bonds

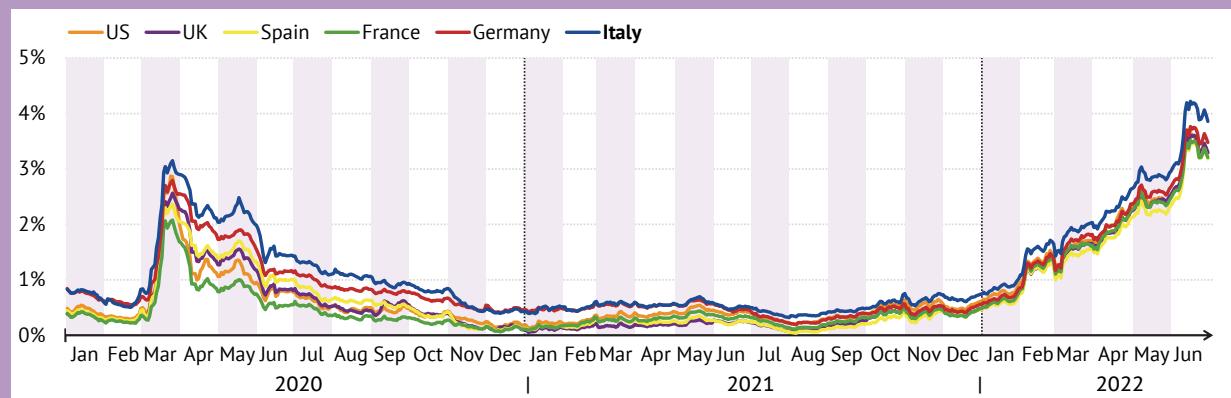
## TRENDS IN BOND YIELDS

(daily data up to 30 June 2022)

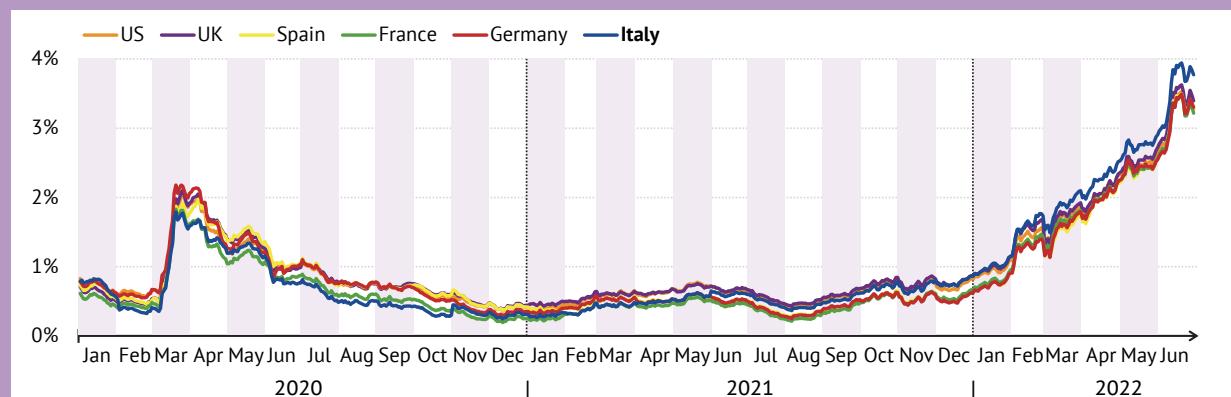
### Sovereign 10-years bonds



### Bank bonds



### Non-financial corporation bonds



Source: Refinitiv Datastream. Figure refers to Markit Iboxx Indexes.

- Nel primo semestre del 2022, i mercati secondari dei titoli pubblici hanno registrato significativi rialzi nei rendimenti in tutte le economie avanzate, a fronte del peggioramento delle prospettive di crescita globale e del rialzo dei tassi di interesse di riferimento, già operato da alcune banche centrali e atteso nell'area euro. In Italia, il rendimento del BTP a 10 anni ha superato nel mese di giugno il 4%, toccando i massimi degli ultimi otto anni. Analogamente si osserva nel mercato secondario dei titoli *corporate*, dove i rendimenti delle obbligazioni emesse sia dalle banche sia dalle imprese non finanziarie hanno sperimentato una crescita costante dall'inizio dell'anno (Fig. 3.1 - Fig. 3.2).
- Nell'area euro si è registrato anche un netto incremento della volatilità dei rendimenti dei titoli pubblici, che a fine giugno 2022 ha raggiunto i massimi dal 2014. Le condizioni di liquidità dei mercati secondari del debito sovrano rimangono invece piuttosto distese, anche nel confronto con le tendenze osservate a ridosso dell'esplosione della pandemia da COVID-19 (Fig. 3.3 - Fig. 3.4).
- Rispetto al primo semestre del 2021, nella prima metà dell'anno le emissioni di titoli pubblici sono state più contenute in tutti i paesi dell'area euro. In Italia l'ammontare emesso si è portato al 7% del debito totale da valori superiori al 10% nei primi sei mesi del 2021<sup>3</sup>. Nel confronto con le maggiori economie dell'Eurozona, l'Italia presenta, dopo la Germania, la
- In the first half of 2022, secondary markets for government bonds recorded significant rises in yields in all advanced economies, against the backdrop of worsening global growth prospects and increasing benchmark interest rates, already raised by some central banks and expected in the euro area. In Italy, the yield on the 10-year BTP exceeded 4% in June, hitting its highest in eight years. A similar trend can be observed in the private bond secondary market, where yields of both bank and non-financial securities have experienced a steady growth since the beginning of the year (Fig. 3.1 - Fig. 3.2).
- The surge in yields is accompanied by a sharp increase in the volatility of euro area government bond yields, which hit its highest since 2014. Secondary market liquidity conditions for government bonds remain rather relaxed, also area compared to those prevailing in the outburst of the pandemic of COVID-19 (Fig. 3.3 - Fig. 3.4).
- In the first semester of 2022, issues of government bonds were lower in all euro area countries compared to the same period of the previous year. In Italy, the amount issued declined to 7% of total debt from over 10% in the first half of 2021. Among the main Eurozone economies, after Germany Italy shows the lowest share of issues of short-term

<sup>3</sup> Si veda il Rapporto CONSOB 2021 'La congiuntura e i rischi per il sistema finanziario italiano in una prospettiva comparata', [https://www.consob.it/web/area-pubblica/abs-cr/-/asset\\_publisher/8TxFpAXoVqad/content/report-cr-2021/11973](https://www.consob.it/web/area-pubblica/abs-cr/-/asset_publisher/8TxFpAXoVqad/content/report-cr-2021/11973).

quota di emissioni di titoli a breve scadenza più contenuta (rispettivamente circa 40% e 36%). Rispetto a Francia e Spagna, risultano più pronunciati i rischi di rifinanziamento del debito domestico, essendo maggiore la quota di titoli in scadenza entro la fine del 2023 (circa il 22% del totale delle obbligazioni in circolazione, a fronte di valori oscillanti tra 17% e 18% rispettivamente per i paesi considerati; Fig. 3.5).

- L'analisi della distribuzione delle emissioni di titoli pubblici a tasso fisso per classi di rendimento mostra il significativo incremento del costo di finanziamento del debito sovrano sperimentato dai maggiori paesi dell'area euro nel primo semestre 2022 rispetto al corrispondente periodo dell'anno precedente. Negli ultimi sei mesi, infatti, e in tutti i paesi considerati, si è fortemente ridotta la quota di emissioni con rendimenti negativi mentre è cresciuta quella con rendimenti superiori al 2% (Fig. 3.6).
- Con specifico riferimento all'Italia, nel primo semestre 2022 il mercato primario ha continuato a caratterizzarsi per una domanda di titoli in sede di asta significativamente superiore all'offerta, mentre la curva dei rendimenti si è nettamente innalzata, specie sulle scadenze tra due e 10 anni (Fig. 3.7).
- Nel mercato primario delle obbligazioni private, nel 2021 le emissioni nette delle banche europee hanno continuato a mostrare valori prossimi allo zero per effetto della ricomposizione delle relative fonti di finanziamento, negli ultimi anni sempre più concentrate su depositi e

securities (respectively, 36% and around 40%). With respect to France and Spain, refinancing risks are more pronounced for the Italian debt, as the bonds maturing by the end of 2023 account for 22% of total outstanding bonds (while this figure ranges between 17% and 18% respectively for France and Spain; Fig. 3.5).

- The distribution of fixed-rate government bond issues by yield class shows the significant increase in the cost of financing sovereign debt experienced by the largest euro area countries in the first half of 2022 compared to the corresponding period of the previous year. Indeed, over the past six months, and in all countries considered, the share of issues with negative yields has fallen sharply while those with yields above 2% have risen (Fig. 3.6).
- As for Italy, in the first half of 2022, the primary market continued to be characterised by a demand for bonds at auction significantly exceeding supply, while the yield curve sharply shifted upwards, especially for maturities between two and 10 years (Fig. 3.7).
- In the primary market for private bonds, in 2021 the net issues of European banks continued to be close to zero as a result of the rebalancing of their funding, in recent years increasingly focused on deposits and on recourse to refinancing with the Eurosystem, fostered by interest

ricorso all'Eurosistema per effetto di tassi di interesse particolarmente convenienti. In Italia il calo delle emissioni di obbligazioni bancarie ha riguardato soprattutto i collocamenti destinati a investitori istituzionali.

Le emissioni obbligazionarie delle imprese non finanziarie hanno registrato, invece, un andamento positivo sia in Europa sia in Italia, grazie anche a tassi di interesse ancora piuttosto contenuti (Fig. 3.8 - Fig. 3.9).

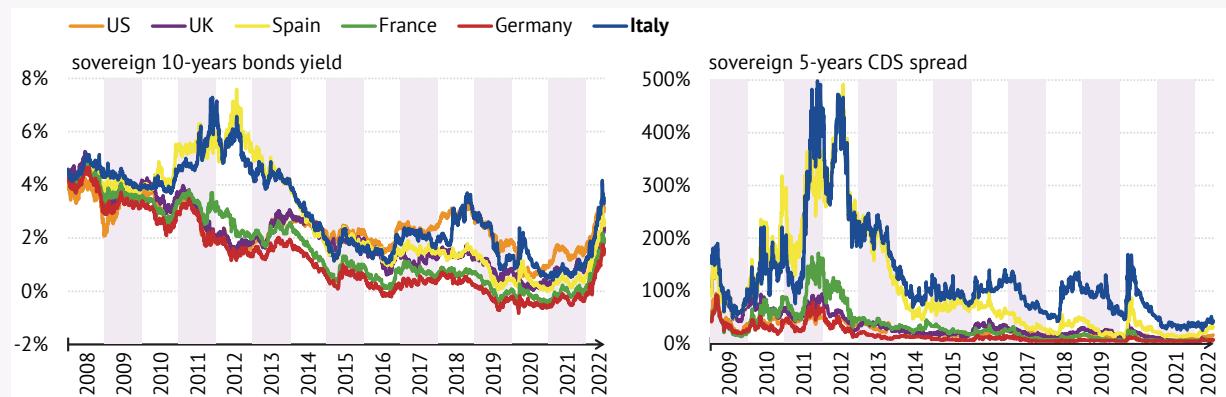
rates still quite favourable. In Italy, the decline in bank bond issues mainly refers to issuances reserved to institutional investors.

On the other hand, bond issues by non-financial companies recorded a positive trend both in Europe and in Italy, also benefiting from the still rather low interest rates (Fig. 3.8 - Fig. 3.9).

## List of figures

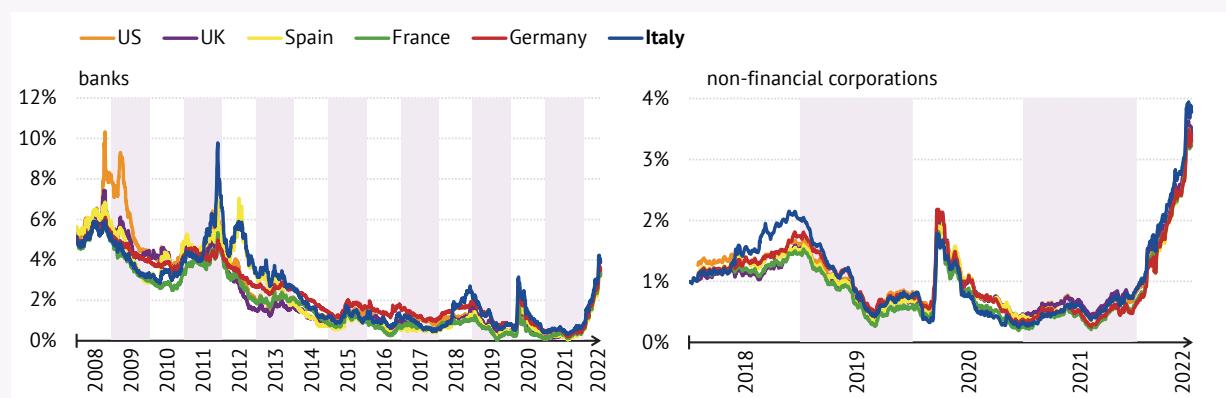
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**Fig. 3.1 – Sovereign bond yields and CDS spreads in the main advanced countries**  
 (daily data up to 30 June 2022)



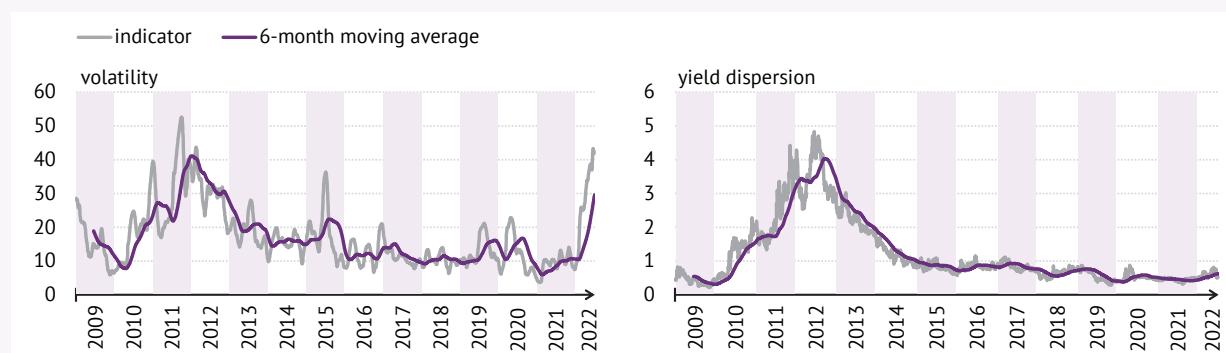
Source: Refinitiv Datastream.

**Fig. 3.2 – Bank and NFCs bond yields in the main advanced countries**  
 (daily data up to 30 June 2022)



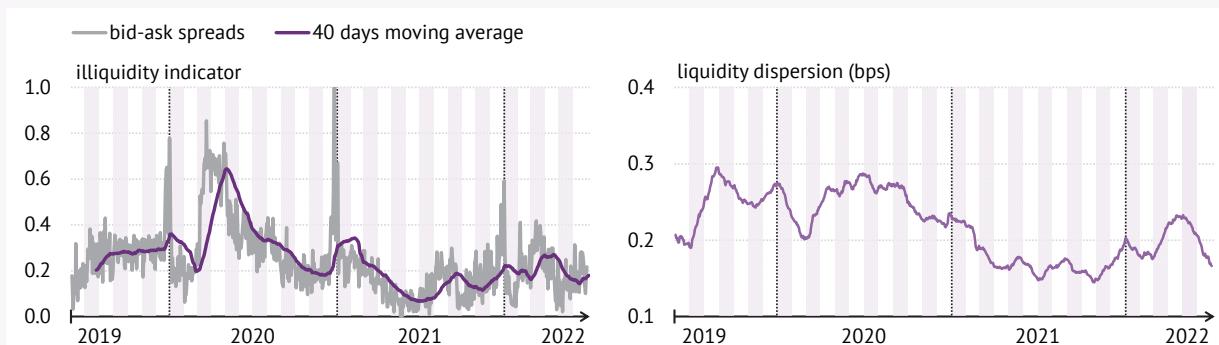
Source: Refinitiv Datastream. Data refers to Markit Iboxx indexes.

**Fig. 3.3 – Sovereign bond volatility and yield dispersion in the euro area**  
 (daily data up to 30 June 2022; basis points)



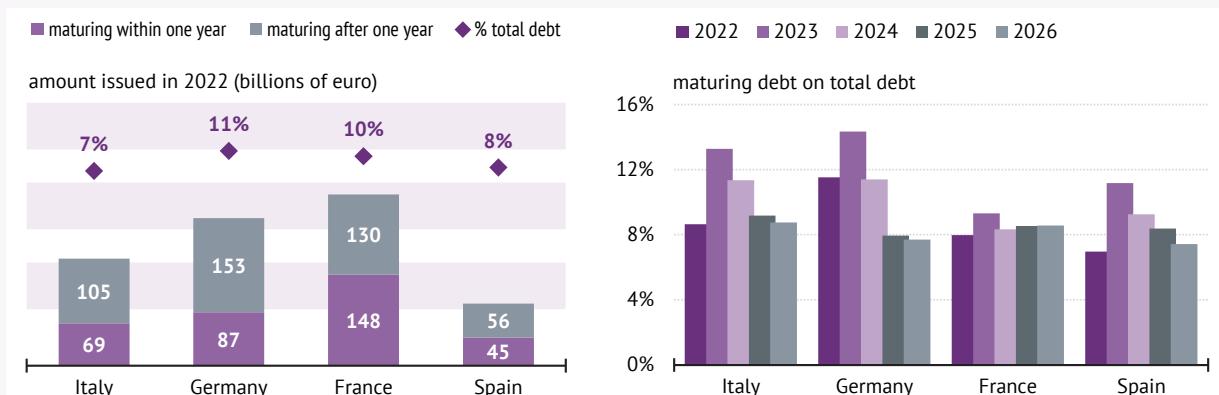
Source: Refinitiv Eikon. On the left graph, volatility is measured as the average across countries of 3-month yield standard deviation for 10Y benchmark sovereign bonds. 10 EU27 domestic markets (AT, BE, DE, ES, FI, FR, IE, IT, NL and PT) countries are included. Yield dispersion is measured as the average difference between the 75<sup>th</sup> percentile and the 25<sup>th</sup> percentile across countries yields.

**Fig. 3.4 – Sovereign bond liquidity in the euro area**  
(daily data up to 30 June 2022)



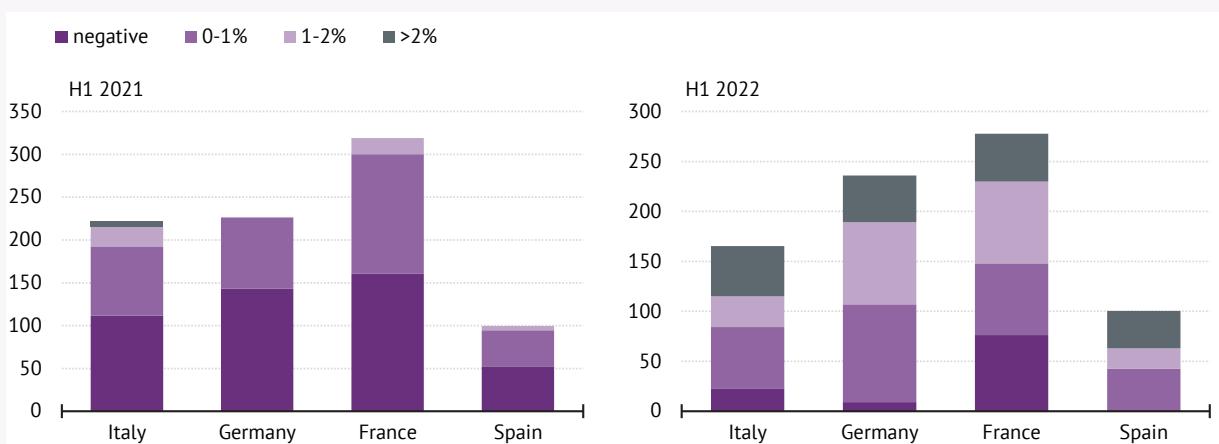
Source: Refinitiv Eikon. Liquidity is measured as average across countries of the bid-ask yields difference for 10Y+ sovereign bonds (FTSE Global government constituent list). Lower figures mean more liquidity and vice-versa. 10 EU27 domestic markets (AT, BE, DE, ES, FI, FR, IE, IT, NL and PT) countries are included. The illiquidity indicator is normalized between 0 (=minimum) and 1 (=maximum). Liquidity dispersion is measured as the daily difference between the 75<sup>th</sup> percentile and the 25<sup>th</sup> percentile across countries bid-ask spreads (40 days moving average).

**Fig. 3.5 – Sovereign bond issues and public debt maturity structure in the main euro area countries**

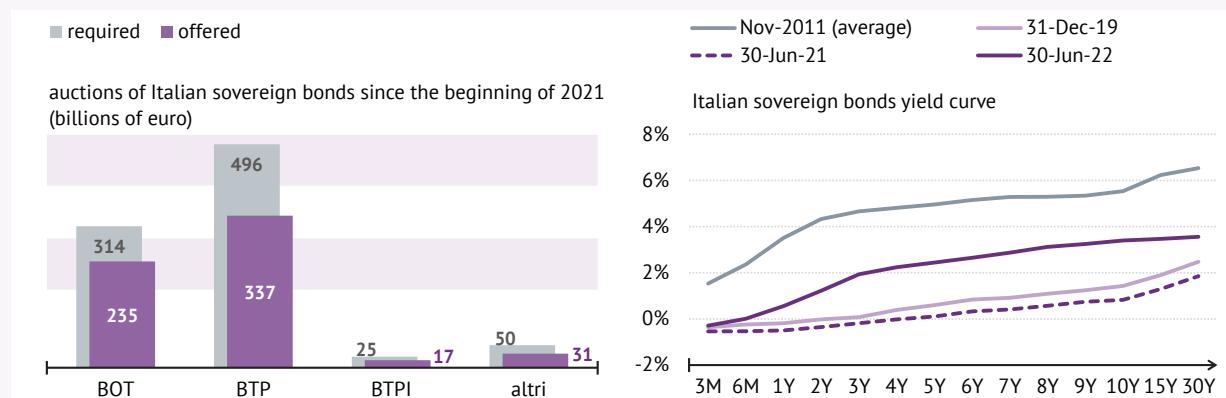


Source: calculations on Eikon data. The amount issued in 2022 refers to bonds issued in 2022 and still outstanding as of 10 July 2022.

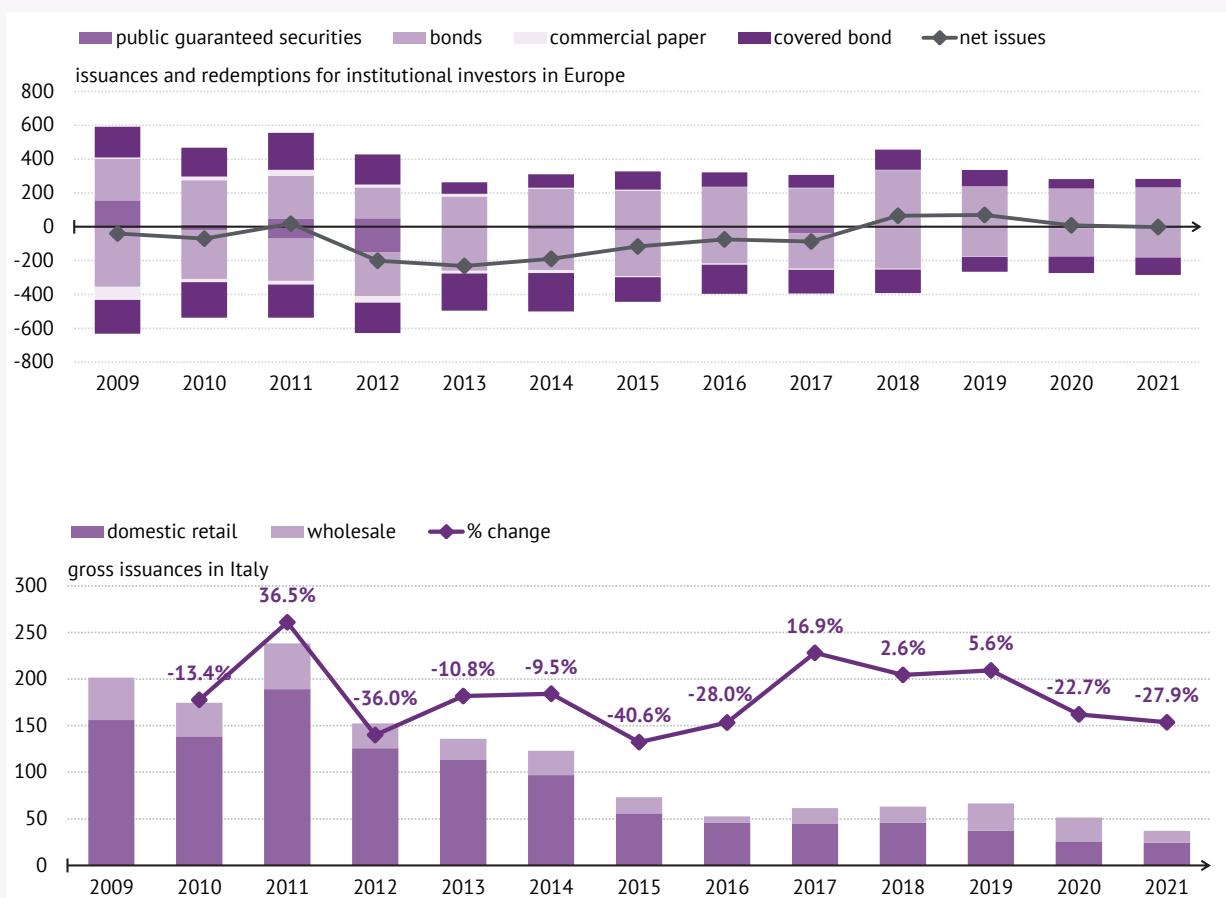
**Fig. 3.6 – Fixed-rate sovereign bond issues by yield category in the main euro area countries**  
(amounts in billions of euro)



Source: calculations on Eikon data. The amount issued refers to bonds still outstanding as of 10 July 2022.

**Fig. 3.7 – Italian sovereign bond auctions in 2021 and in the first half of 2022 and sovereign bond yield curve**

Source: calculation on Bank of Italy and Refinitiv Datastream data.

**Fig. 3.8 – Bank bond issues in the main European countries**  
(yearly data; billions of euro)

Source: Dealogic. European countries include France, Germany, Spain and the UK.

**Fig. 3.9 – NFCs bond issues in the main European countries**  
(issuances and redemptions for institutional investors; yearly data; billions of euro)



Source: Dealogic. European countries include France, Germany, Spain and the UK.



# Società non finanziarie

**Non-financial  
corporations**



Ricavi e costi operativi

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Redditività e leverage

---

Flussi di cassa e liquidità

---

Vulnerabilità

---

Revenues and operating expenses

---

Profitability and leverage

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Cash flow and liquidity

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Vulnerabilities

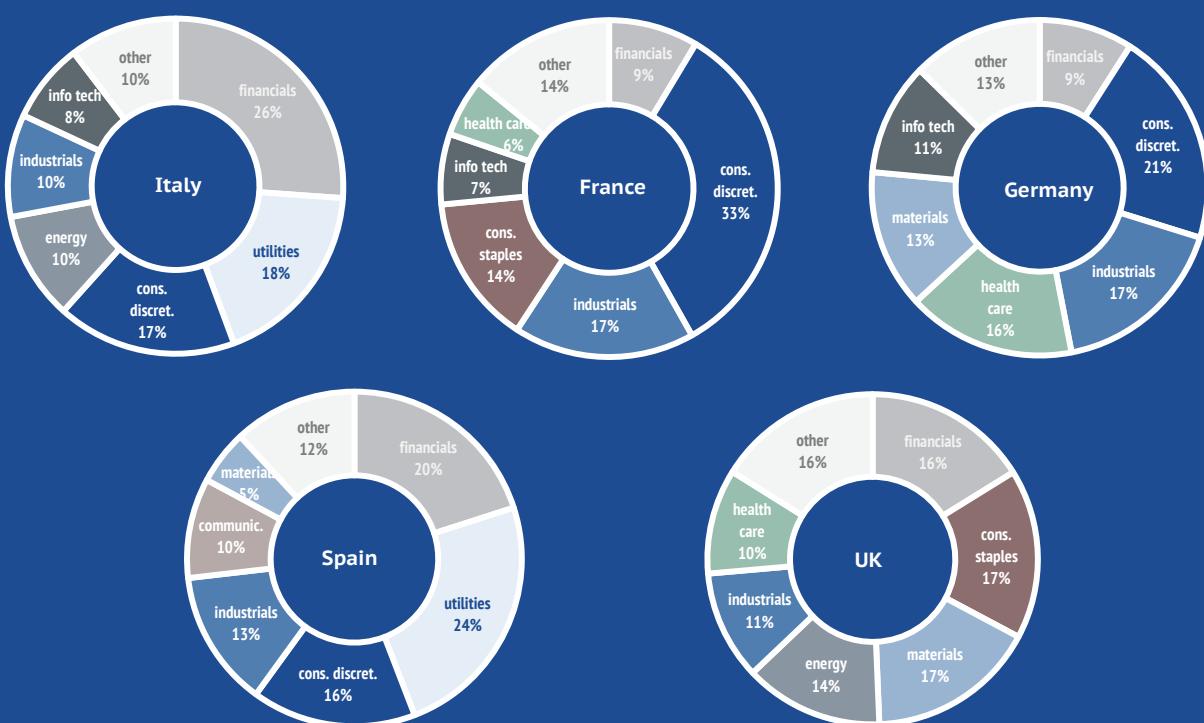
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- Uscite dalla recessione indotta dalla pandemia, le grandi imprese europee quotate non finanziarie (di seguito, NFCs) hanno registrato un significativo recupero in termini di fatturato nel 2021, più forte per l'Italia (+44% anno su anno) e compreso fra il 9% (in Germania) e il 20% (in Francia). Anche i costi operativi sono risultati in aumento, ma a un tasso inferiore rispetto al fatturato (ad eccezione del Regno Unito, dove i costi si sono contratti, in media, anche nel 2021). Di conseguenza, la redditività (misurata da EBIT e utile netto) è aumentata nettamente nel 2021, con i maggiori incrementi anno su anno registrati dalle imprese spagnole e inglesi; similmente, gli indicatori di redditività misurata da ROE e ROA (Fig. 4.1 - Fig. 4.3).

- After the pandemic-induced slump of 2020, revenues of large European non-financial companies (henceforth NFCs) recovered significantly across the continent in 2021, displaying a stronger (year-on-year) rebound in Italy (+44%), and ranging from about +9% in Germany to +20% in France. Operating expenses were also on the rise, but at a slower rate than revenues, except for the UK large companies, where costs contracted also in 2021.

- As a consequence, profitability (as measured by EBIT and net income) rose sharply in 2021, with the highest year-on-year growth in net income reported by Spanish and UK companies; so did profitability ratios, as measured by ROE and ROA (Fig. 4.1 - Fig. 4.3).

## Market capitalisation of listed companies (breakdown by sector at the end of 2021)



- Le stime degli analisti, che potrebbero non incorporare appieno l'impatto dei più recenti sviluppi a livello macroeconomico, indicano per le NFCs una crescita del fatturato anche nel 2022 (rispettivamente del 32%, 21%, 20%, 14% e 9% per le grandi imprese inglesi, francesi, spagnole, tedesche e italiane), principalmente per gli incrementi nel settore dell'energia e *consumer discretionary*. Anche il reddito operativo (EBIT) è stimato in crescita nel 2022 per tutto il campione, e un andamento simile è previsto per l'utile netto, sebbene con alcune eccezioni. Le stime per il 2023 indicano un rallentamento nella crescita di fatturato e redditività (Fig. 4.4).

- Con riferimento alla struttura finanziaria, nel 2021 le NFCs inglesi e francesi si confermano come le più capitalizzate (rispettivamente con capitale proprio pari al 37% e 34% del totale attivo). Le grandi società italiane mostrano in media una *equity base* più ristretta, in parte compensata però dal maggiore ricorso al debito a medio-lungo termine (Fig. 4.5 - Fig. 4.6).

- Nel 2021, il *leverage* (definito come rapporto fra debito totale e capitale) è diminuito in media per tutto il campione (dal 152% al 129% per le imprese italiane), e rimane strutturalmente più elevato per le società spagnole e italiane, caratterizzate peraltro da una minore incidenza del debito a breve termine. Ad eccezione delle imprese tedesche, l'indebitamento netto delle NFCs è diminuito leggermente nel 2021 (-5% per l'Italia). L'indice di copertura degli oneri finanziari (*interest expense coverage ratio*) è migliorato insieme alla già menzionata crescita del fatturato e del reddito operativo, passando da un minimo di 6,1 (2,3 nel 2020) per le

- Looking at estimates, which might not timely reflect the rapidly changing macroeconomic scenario, large NFCs revenues are expected to keep increasing further in 2022, with UK, French, Spain, Italy and German companies recording an average growth rate of respectively 32%, 21%, 20%, 14% and 9%, mainly due to increases in the consumer discretionary and energy sectors. Operating income (EBIT) is estimated to further increase across the whole sample in 2022, and a similar trend is also expected for net income, although with some exceptions. Estimates for 2023 point to a slowdown in revenue and profitability growth (Fig. 4.4).

- As for the financial structure, in 2021 UK and French large NFCs remained the most capitalised (with their equity equal on average to 37% and 34% of total assets, respectively). Italian large companies display on average a structurally lower equity base, albeit partially compensated by the reliance on a higher long-term debt share (Fig. 4.5 - Fig. 4.6).

- Leverage (the ratio of total debt to equity) declined on average across the whole sample (from 152% to 129% for Italian NFCs), and remained structurally higher for Spanish and Italian large corporates, that are also characterised by a lower incidence of short-term debt.

With the exception of German companies, net debt of large NFCs fell slightly in 2021 (-5% for Italy). Debt service coverage markedly improved along with the above mentioned positive trend in revenues and EBIT, with average interest expense coverage ratio ranging from a minimum of 6.1 (up from 2.3 in 2020) for Italian

imprese italiane a un massimo di 13,9 (5,1 nel 2020) per le imprese francesi. Considerando ancora le stime, l'indebitamento netto delle NFCs è atteso in lieve calo per tutto il campione, in misura maggiore per le imprese francesi (-32%) e italiane (-9%). Le grandi imprese hanno registrato anche una solida generazione di cassa nel 2021, sia in termini di *cash flow* operativo che di *free cash flow* (Fig. 4.7 - Fig. 4.9).

- Nel 2021, le imprese italiane ed europee hanno evidenziato significativi miglioramenti in termini di vulnerabilità rispetto all'anno precedente. In primo luogo, è diminuita la percentuale di imprese con indicatori peggiorati rispetto alla media decennale, per tutti gli indicatori considerati (fatturato, redditività, leverage, *cash flow*, etc.). In secondo luogo, la percentuale di imprese con vulnerabilità 'congiunte' (ad es. utile netto ed EBIT negativi; debito netto in aumento e indice di copertura degli oneri finanziari in calo) è diminuita per la maggior parte degli indicatori (Fig. 4.10 - Fig. 4.11).

- Considerando un dato riepilogativo, la percentuale delle grandi imprese che evidenziano multiple vulnerabilità allo stesso tempo (ad es. 4 o più) – un evento associato a un significativo livello di rischio – nel 2021 era pari all'11% circa del campione per le imprese italiane (in linea con il 2020); per le grandi società europee, il dato varia dal 3% al 6%, 13% e 17% rispettivamente per le imprese tedesche, francesi, inglesi e spagnole. La percentuale di imprese che non evidenziano vulnerabilità è comunque più alta (al 18% per l'Italia, e al 24% per la media europea; Fig. 4.12).

companies to a maximum of 13.9 (up from 5.1) for French companies. Considering again estimates, net debt of large NFCs is expected to decline across the sample in 2022, in particular for French (-32%) and Italian (-9%) large corporates. NFCs also displayed a sound liquidity generation across the whole sample in 2021, both in terms of operating and free cash flows (Fig. 4.7 - Fig. 4.9).

- In 2021, large Italian and European NFCs displayed significant improvements in terms of vulnerabilities with respect to the previous year. In the first place, the share of companies with worsened current financial indicators relative to their 10-year average fell for all monitored indicators (revenues, profitability, leverage, cash flows) and across all countries. Secondly, the share of companies with joint vulnerabilities (such as both net income and EBIT negative, or net debt on the rise and deteriorated interest coverage ratio) declined or did not increase for most indicators (Fig. 4.10 - Fig. 4.11).

- Considering an overall score, the incidence of large companies showing at the same time a given *minimum multiple* (e.g. 4 or more) of financial vulnerabilities (an event considered associated to a significant level of risk) was equal to 11% for Italian large NFCs at the end of 2021 (in line with 2020); for European large companies the figure ranges from about 3%, 5%, 14% respectively for German and French, UK and Spanish firms.

However, the proportion of large firms with the highest score is higher, both for Italy (18%) and for the EU average (24%; Fig. 4.12).

## NON-FINANCIAL LISTED SMEs

- Con riferimento alle piccole e medie imprese (PMI) quotate e con una capitalizzazione di mercato a fine anno inferiore a 250 milioni di euro, nel 2021 le imprese italiane hanno riportato un significativo recupero dei ricavi, insieme a una contrazione dei costi operativi (rispettivamente, +14% e +19% rispetto all'anno precedente).

In Europa, mentre a fine anno le PMI tedesche e francesi evidenziavano modesti incrementi di fatturato, le imprese spagnole hanno registrato una significativa flessione dei ricavi (-28%, in linea con i costi operativi).

La redditività delle PMI ha recuperato solo parzialmente e in modo disomogeneo dopo il netto calo registrato nel 2020, e nel complesso appare ancora fragile (Fig. 4.13 - Fig. 4.15).

- Con riferimento alla composizione delle attività e delle passività, a fine 2021 il patrimonio netto aggregato delle PMI quotate risulta intorno al 40% delle attività totali per Francia, Germania e Regno Unito, e inferiore a tale soglia per Italia e Spagna.

A fine anno, la leva finanziaria è risultata in calo per le PMI italiane, francesi e inglesi, e in leggero aumento per quelle tedesche e spagnole.

Infine, l'incidenza dell'indebitamento a breve termine appare in linea con l'anno precedente (Fig. 4.16 - Fig. 4.17).

- Focusing on listed small and medium enterprises (SMEs) with a market capitalisation below € 250 million at the end of the year, in 2021 Italian companies reported a significant rebound in revenues and contraction in operating costs (respectively, +14% and -19% compared to 2020).

In Europe, while German and French firms recorded only modest increases in revenue, Spanish SMEs revenues kept slumping (-28%, although in line with operating costs).

Overall, SMEs profitability recovered only partially and unevenly across the sample after the sharp fall in 2020 and looks still fragile (Fig. 4.13 - Fig. 4.15).

- Looking at the composition of assets and liabilities, listed SMEs equity stood on aggregate at around 40% of total assets for France, German and UK companies, and below that threshold for Italy and Spain at the end of 2021.

Leverage declined for Italian, French and UK SMEs, while increased for German and Spanish firms.

At the end of 2021, the incidence of short-term debt remained close to that of the previous year (Fig. 4.16 - Fig. 4.17).

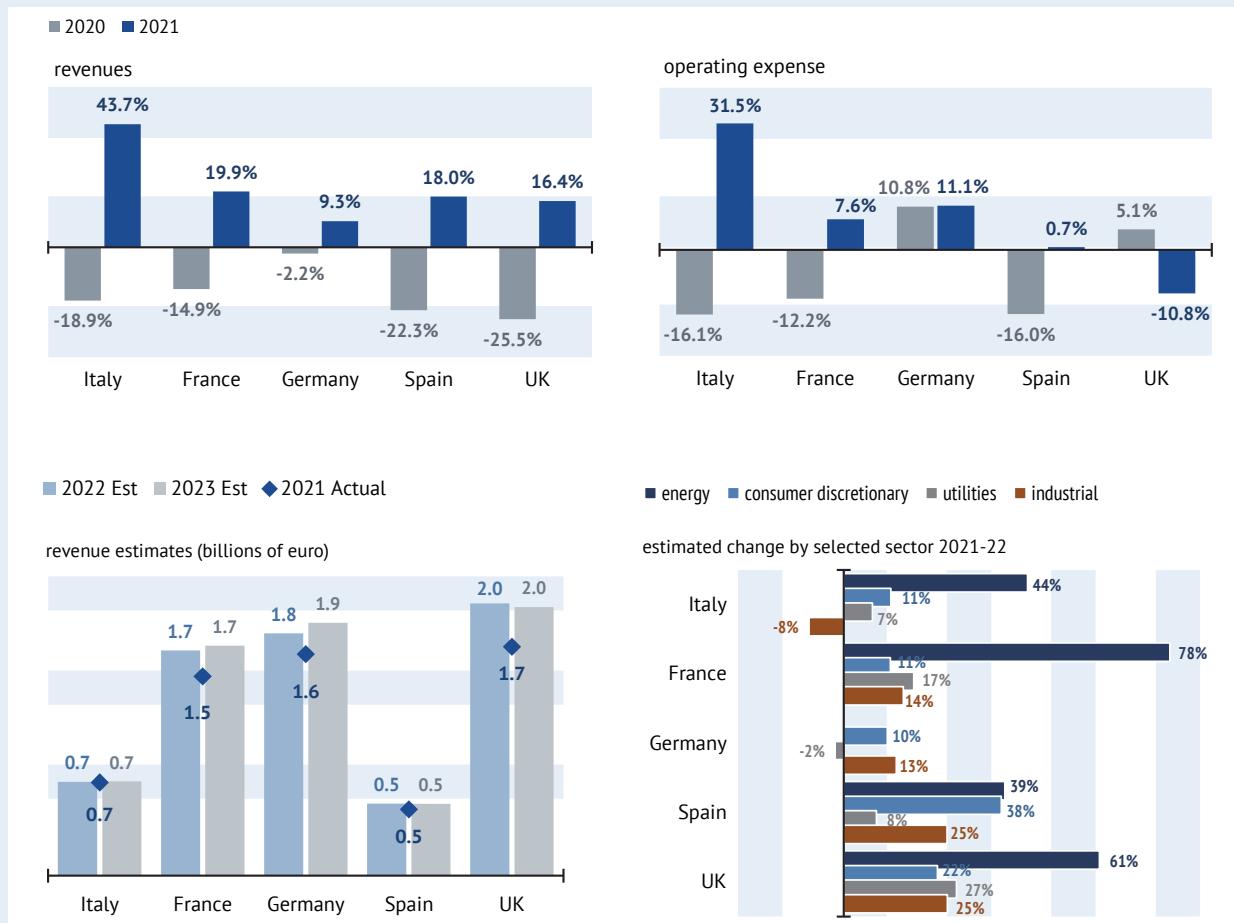
- Applicando il sistema di scoring utilizzato per le grandi imprese e selezionando le imprese che evidenziano multiple vulnerabilità allo stesso tempo (ad es. 4 o più), la percentuale delle PMI italiane con maggiori vulnerabilità risulta pari al 58% (a fronte dell'11% rilevato per le grandi imprese; cfr. Fig. 4.12). Le PMI più solide rappresentano solo una piccola percentuale, compresa fra il 5% (Italia) e il 9% (Germania) del campione (Fig. 4.18).
- Applying the same scoring system used for large companies, and screening for firms with the same *minimum multiple* of vulnerabilities (e.g. 4 or more), the percentage of the weakest Italian SMEs jumps to 58% (vs. 11% for large Italian firms; cfr. Fig. 4.12). The more resilient SMEs represent only a tiny percentage, between 5% (Italy) and 9% (German firms) of the sample (Fig. 4.18).

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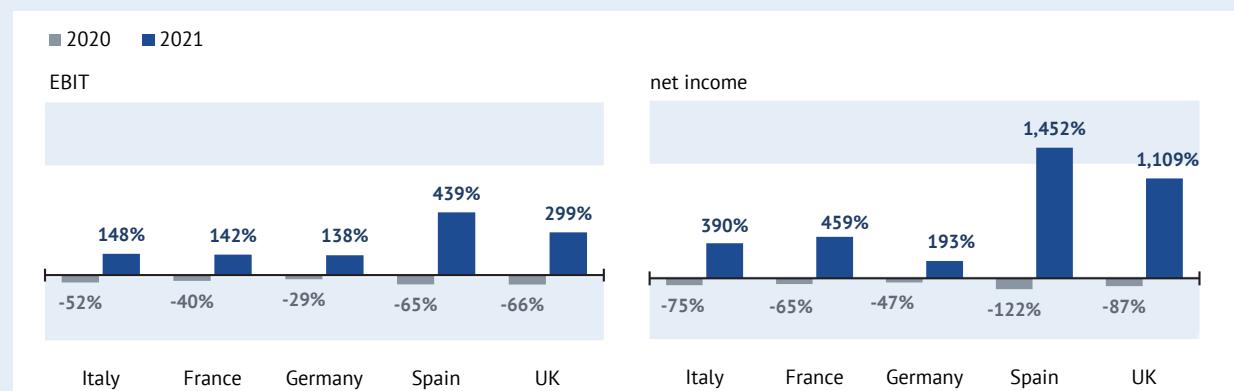
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**Fig. 4.1 – Revenues and operating expenses of large European non-financial listed companies**  
(yearly data; year-on-year percentage change)



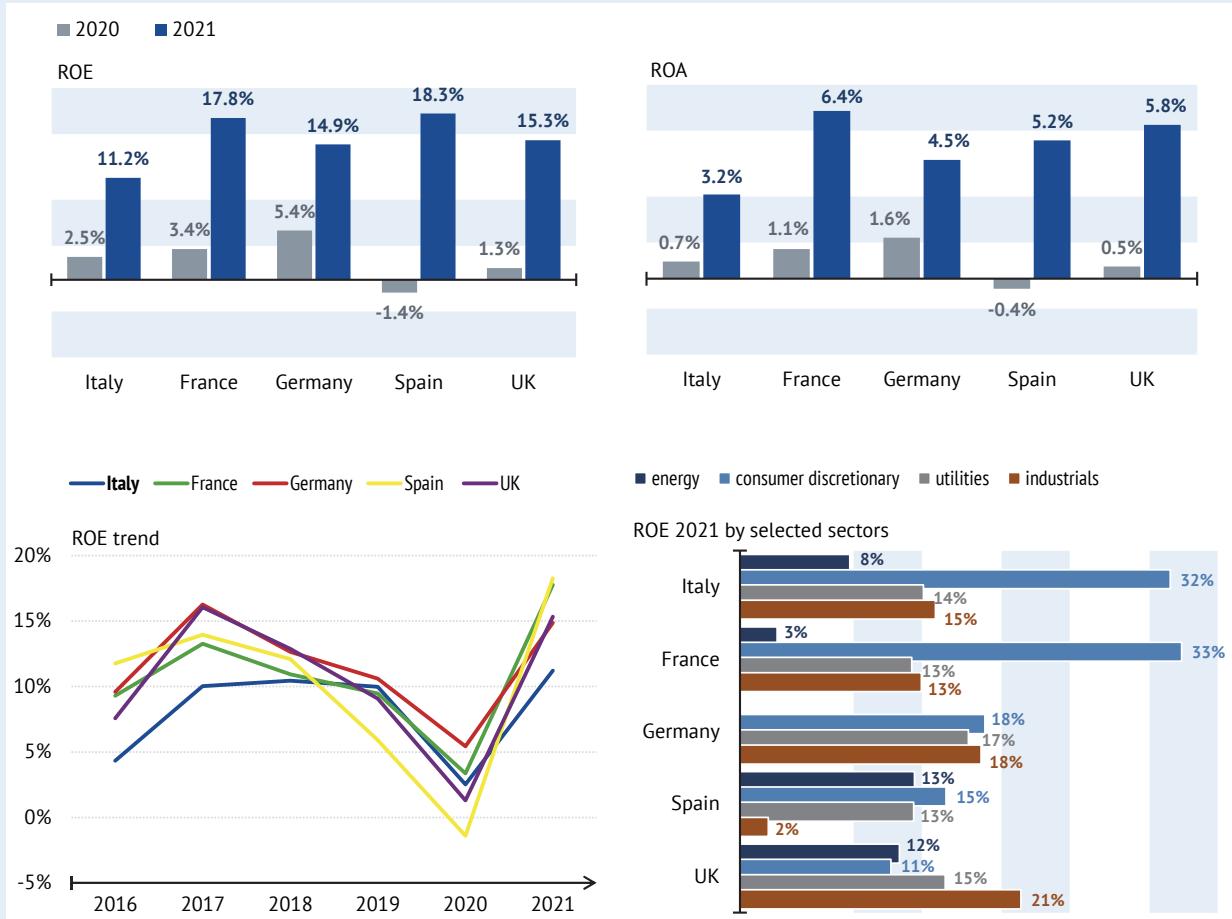
Source: calculations on Bloomberg data. Figures represent the sample data averages. The country name refers to the large non-financial listed companies included in the Ftse Mib equity index for Italy, in the Dax 30 equity index for Germany, in the Cac 40 equity index for France, in the Ibex 35 equity index for Spain, and in the Ftse 100 equity index for the United Kingdom. The estimates represent the aggregate average of the last available estimates for each company covered by analysts as of 30 June 2022.

**Fig. 4.2 – Operating and net income of large European non-financial listed companies**  
(yearly data; year-on-year percentage change)



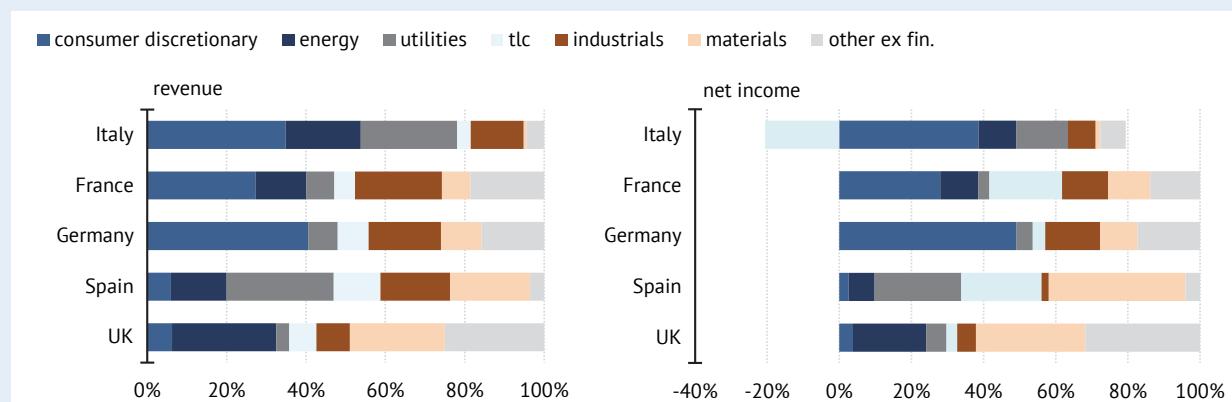
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.3 – Profitability indicators of large European non-financial listed companies**  
(yearly data; year-on-year percentage change)



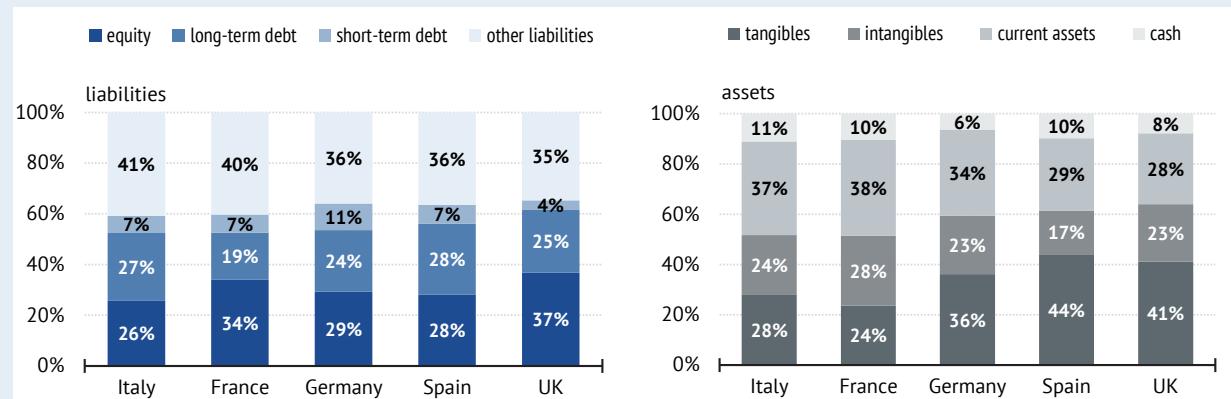
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.4 – Revenue and net income breakdown by sector of large European non-financial listed companies in 2021**



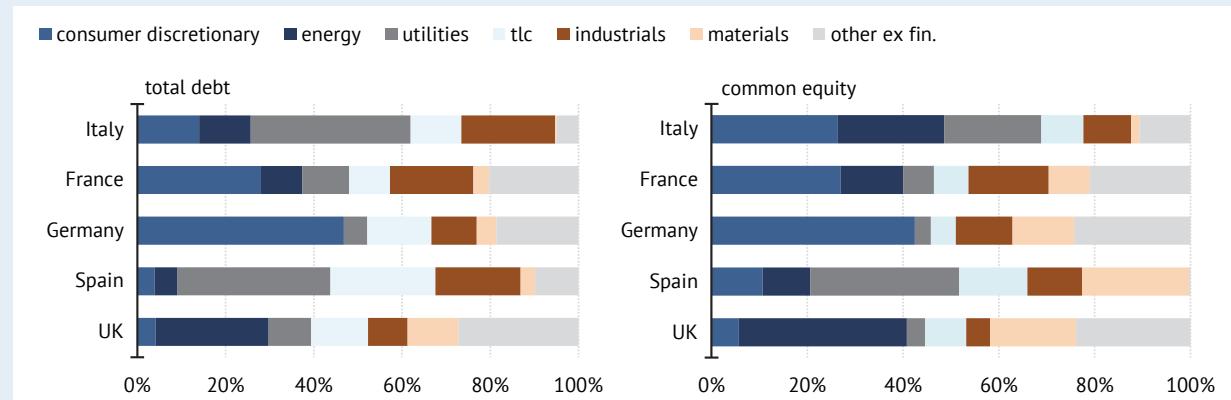
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.5 – Liabilities and assets composition of large European non-financial listed companies in 2021**



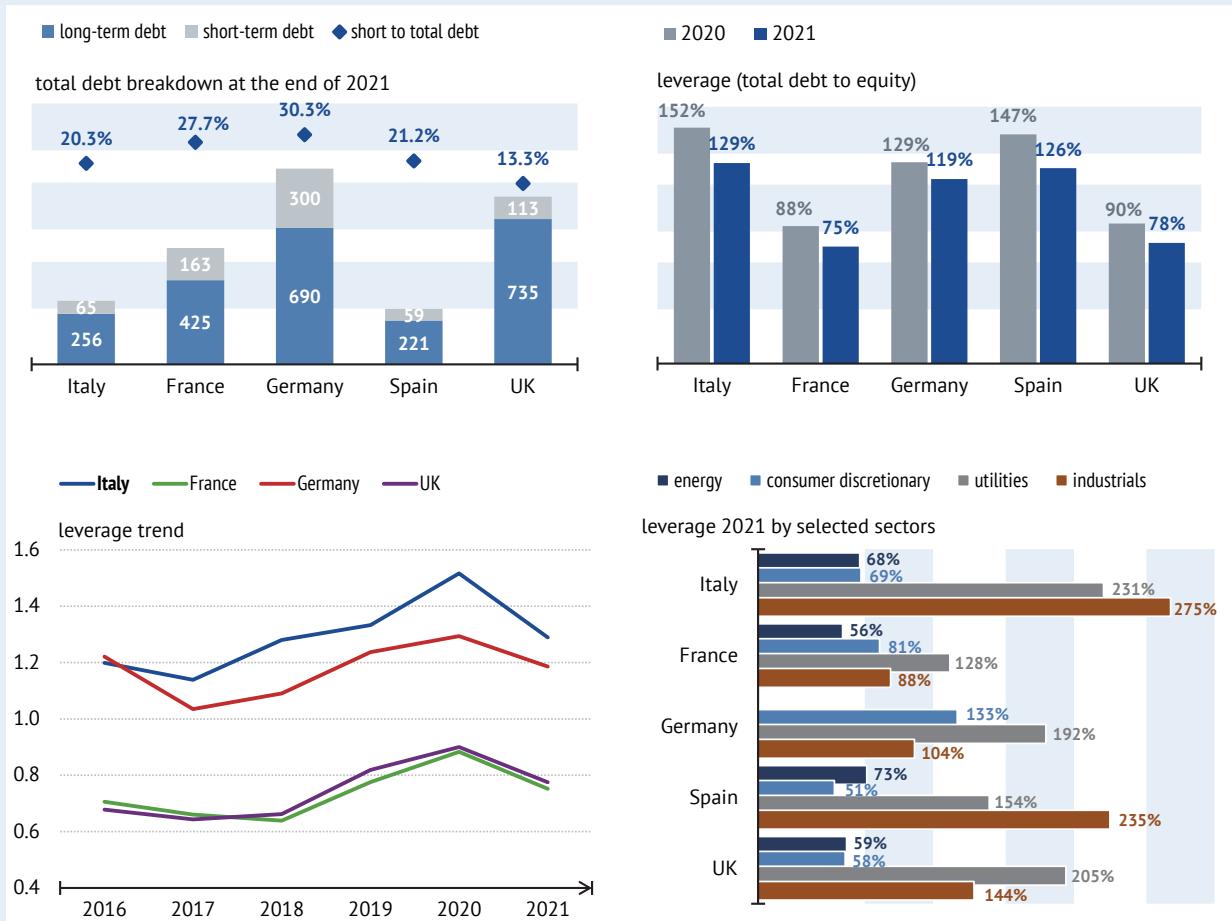
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.6 – Total debt and equity breakdown by sector of large European non-financial listed companies in 2021**



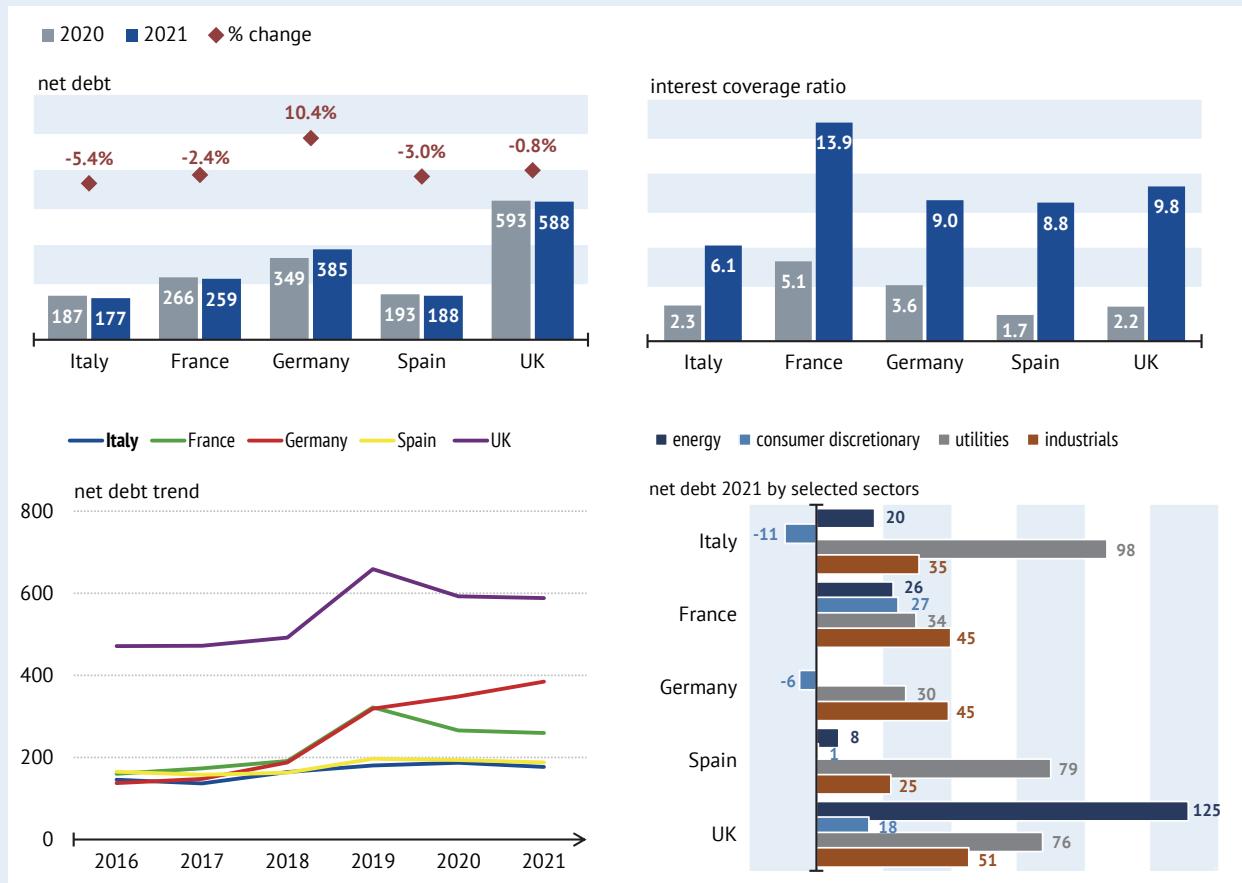
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.7 – Debt breakdown and leverage of large European non-financial listed companies**  
(percentage ratios and billions of euro)



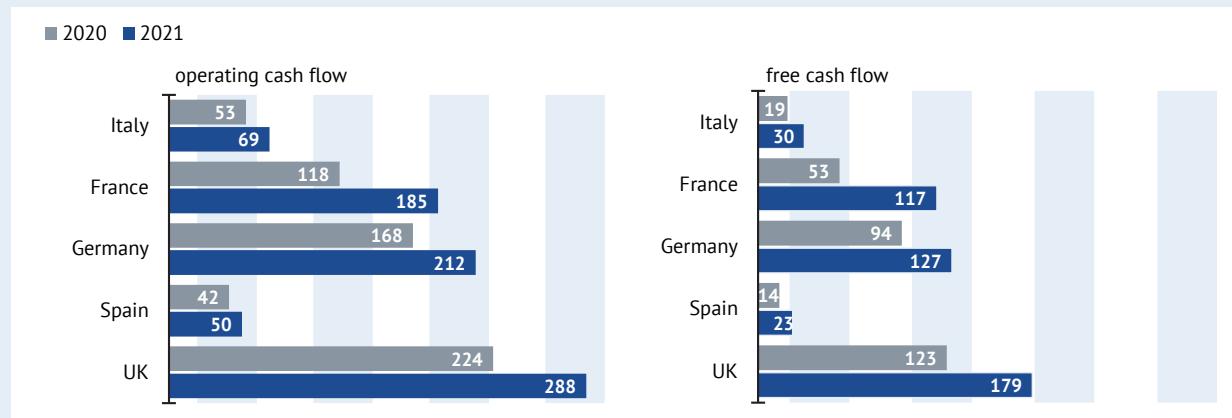
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.8 – Net debt and interest coverage ratio of large European non-financial listed companies**  
(yearly data; percentages and billions of euro)



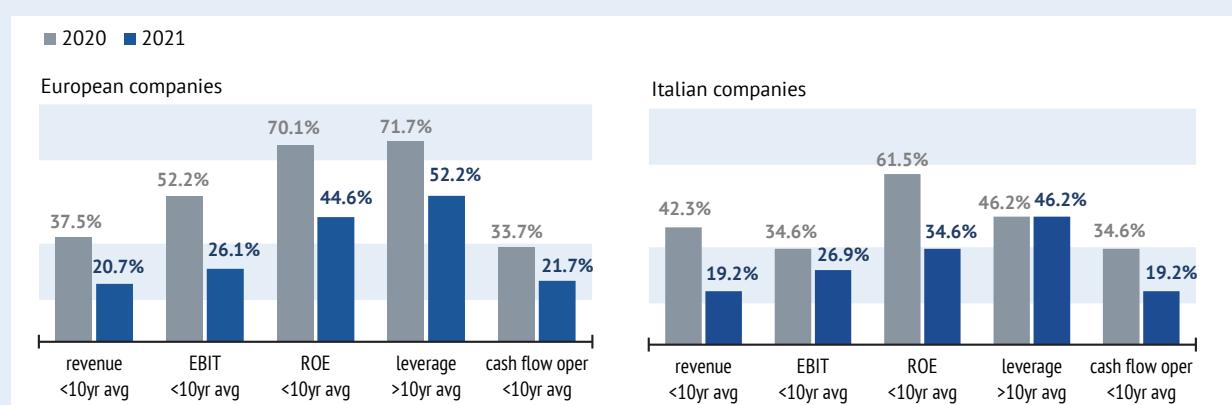
Source: calculations on Bloomberg data. The interest coverage ratio is computed as EBIT divided by interest expenses. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.9 – Cash flows generated by large European non-financial listed companies**  
(yearly data; billions of euro)



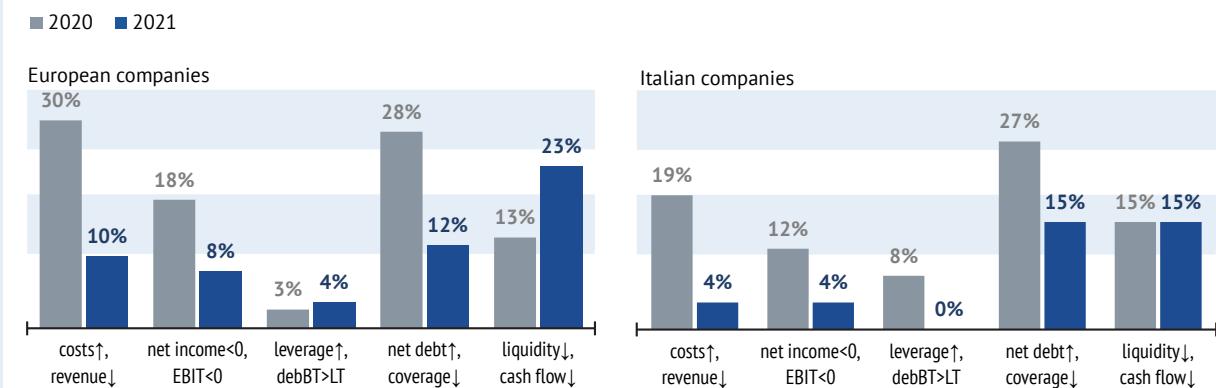
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.10 – Vulnerability of large non-financial listed companies in Europe**  
(share of sample companies with indicators worse than their 10-year average)



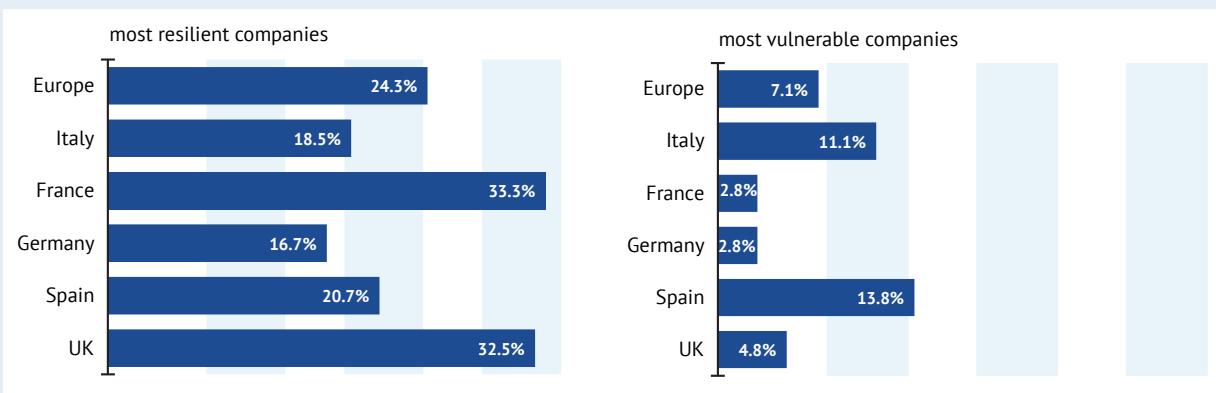
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.11 – Joint vulnerabilities of large non-financial listed companies in Europe**  
(share of sample companies with jointly deteriorating indicators)



Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample.

**Fig. 4.12 – Overall vulnerability of large non-financial listed companies in Europe at the end of 2021**

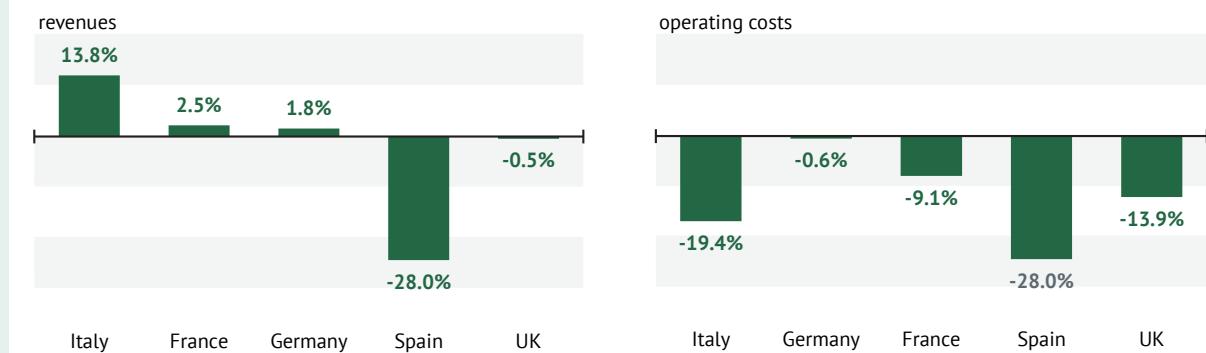


Source: calculations on Bloomberg data. Figures represent the sample data averages. See note to Fig. 4.1 for details on the NFCs included in the sample. Companies are ranked according to a score calculated according to three factors: profitability, financial structure and liquidity generation. As for profitability, changes in revenues and sign of EBIT and net income are considered; for the financial structure, the long-term debt to total assets ratio and the current ratio (current liabilities to current assets) are taken into account; liquidity generation is considered through operating cash flows. By construction, the score is  $\geq 6$  if a company satisfies all the robustness criteria, whereas a score  $= 2$  signals strong vulnerabilities.

## NON-FINANCIAL LISTED SMEs

**Fig. 4.13 – Revenues and operating costs of listed SMEs in the main European countries in 2021**

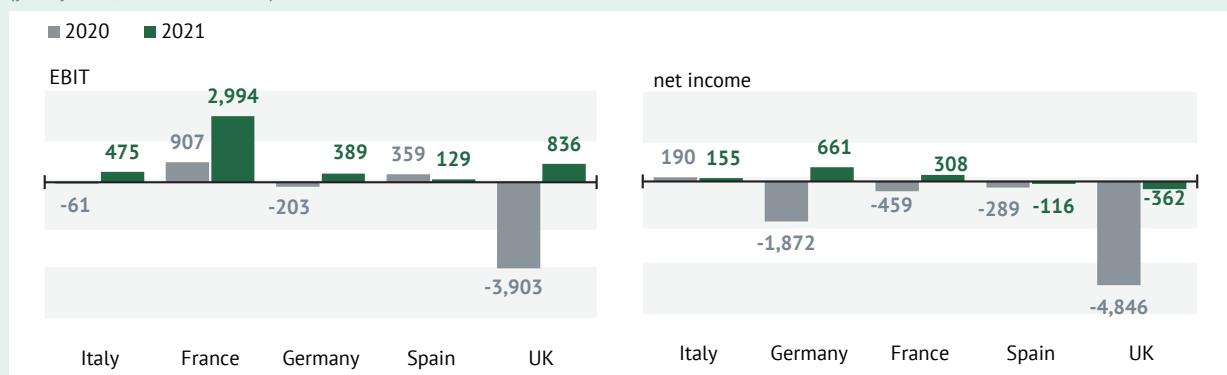
(yearly data; year-on-year percentage change)



Source: calculations on Bloomberg data. Figures represent the sample data averages. The country name refers to the primary Stock Exchange where the Small and Medium Enterprise (SME) are listed. Sampled SMEs had a market capitalisation lower than € 250 million as of December 31, 2021.

**Fig. 4.14 – EBIT and net income of listed SMEs in the main European countries**

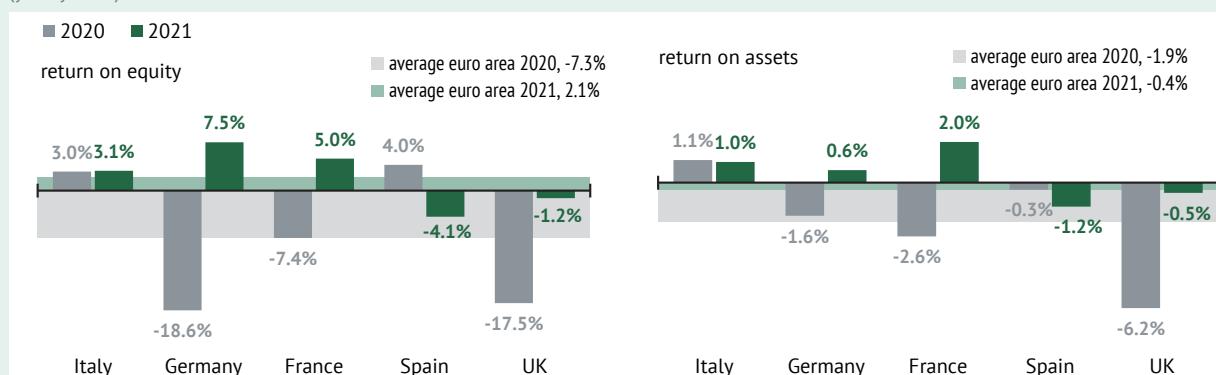
(yearly data; millions of euro)



Source: calculations on Bloomberg data. Figures represent the sample data averages. See note on Fig. 4.13 for more details on the firm sample.

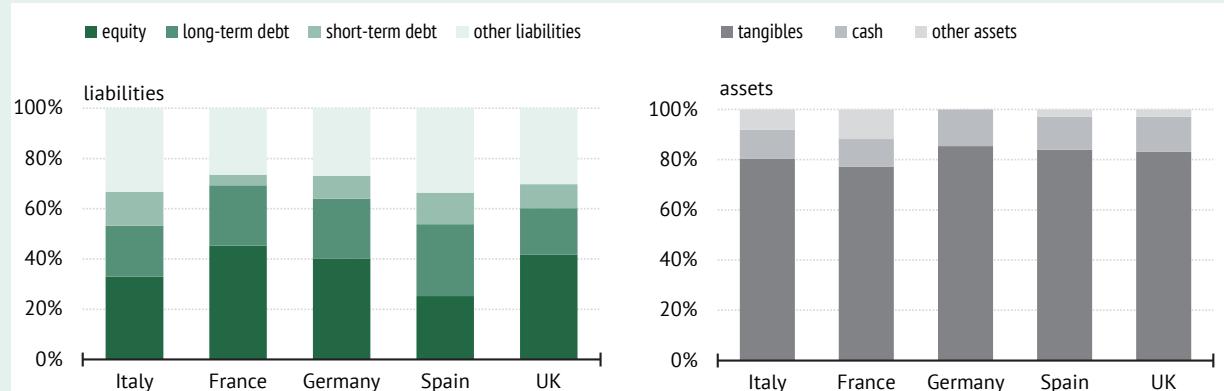
**Fig. 4.15 – ROE and ROA of listed SMEs in the main European countries**

(yearly data)



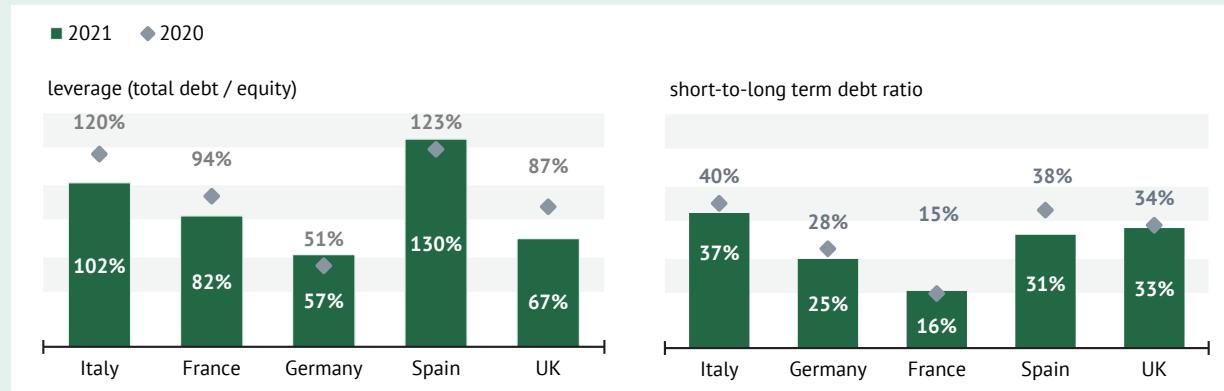
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note on Fig. 4.13 for more details on the firm sample. Both ratios calculated as aggregated sample average. Spanish industrial sector data excluded because of negative equity.

**Fig. 4.16 – Liabilities and assets composition of listed SMEs in the main European countries in 2021**



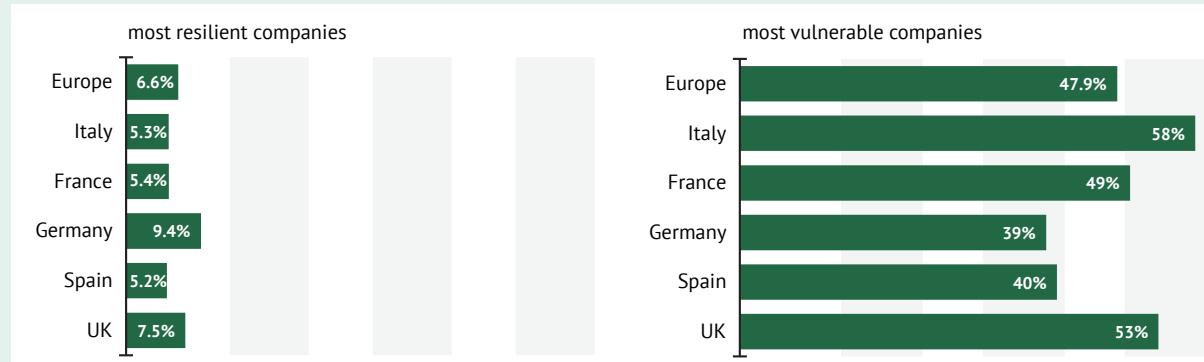
Source: calculations on Bloomberg data. Figures represent the sample data averages. See note on Fig. 4.13 for more details on the firm sample. Spanish industrial sector data excluded because of negative equity. French SMEs equity adjusted for missing data.

**Fig. 4.17 – Leverage and short-term debt incidence of non-financial listed SMEs in the main European countries (yearly data)**

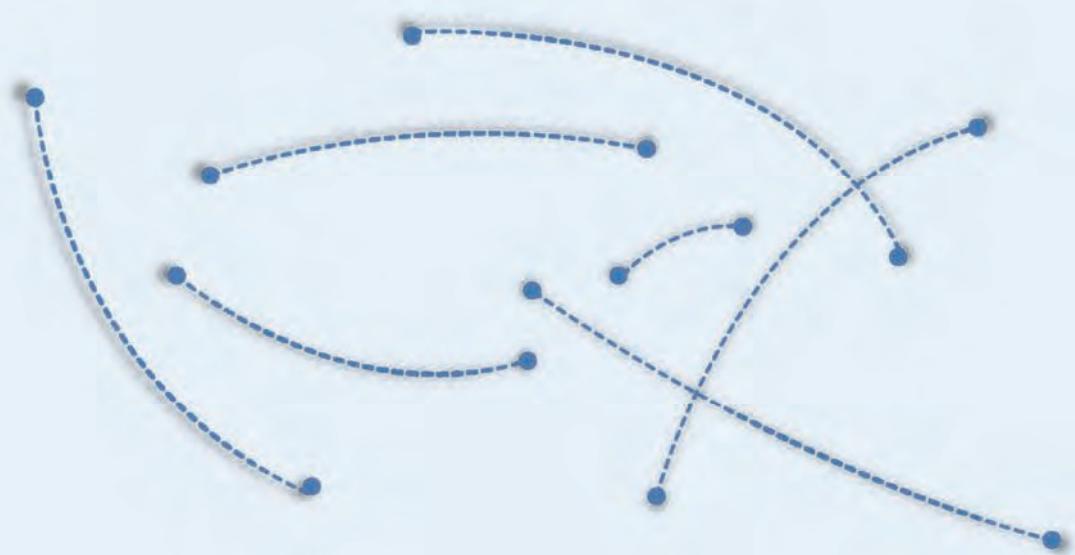


Source: calculations on Bloomberg data. Figures represent the sample data averages. See note on Fig. 4.13 for more details on the firm sample.

**Fig. 4.18 – Overall vulnerability of SMEs non-financial listed companies in Europe at the end of 2021**



Source: calculations on Bloomberg data. Figures represent the sample data averages. See note on Fig. 4.13 for more details on the firm sample. Companies are ranked according to a score calculated according to three factors: profitability, financial structure and liquidity generation. As for profitability, changes in revenues and sign of EBIT and net income are considered; for the financial structure, the long-term debt to total assets ratio and the current ratio (current liabilities to current assets) are taken into account; liquidity generation is considered through operating cash flows. By construction, the score is  $\geq 6$  if a company satisfies all the robustness criteria, whereas a score  $=< 2$  signals strong vulnerabilities.



# Banche

# Banks



**Redditività e adeguatezza patrimoniale**

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**Qualità degli attivi**

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**Esposizione a rischi climatici**

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**Raccolta**

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**Profitability and capital adequacy**

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**Credit quality**

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**Exposure to climate risks**

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**Funding**

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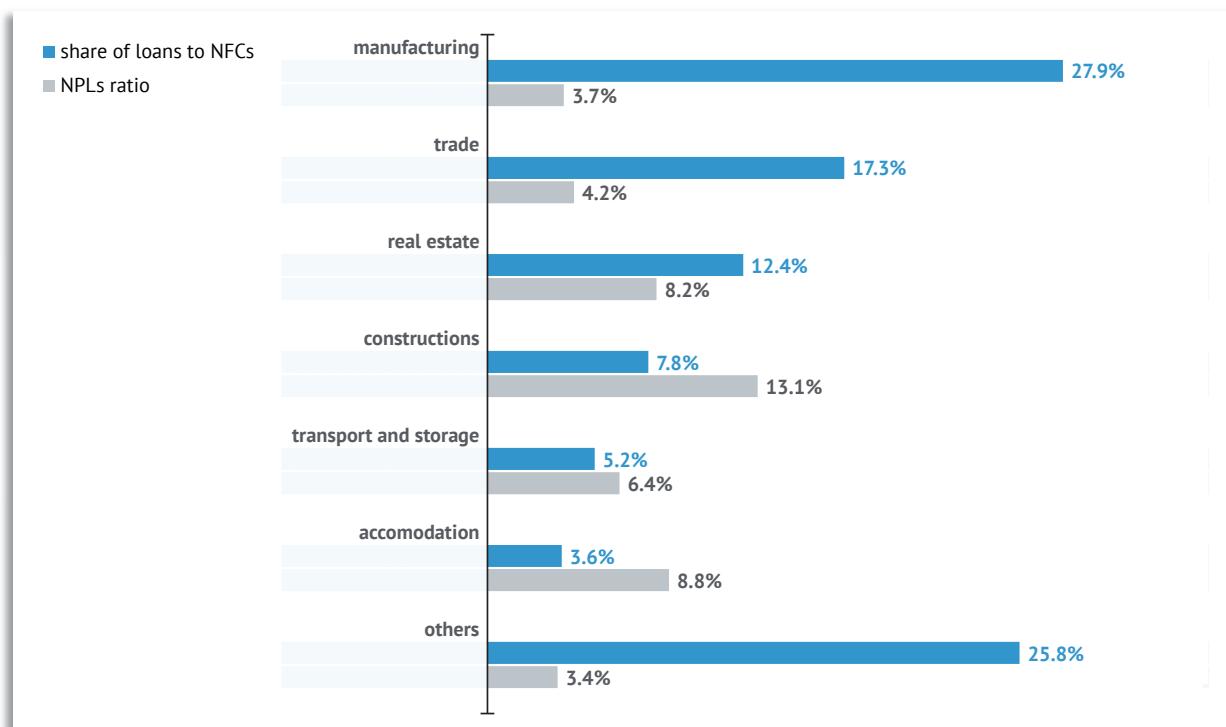
- Nel 2021 le maggiori banche europee e italiane hanno registrato un buon andamento della redditività e dell'efficienza operativa, a fronte della ripresa globale. Gli istituti domestici continuano a caratterizzarsi, nel confronto europeo, per una minore incidenza dei ricavi derivanti dall'attività di trading. A marzo 2022 inoltre, gli istituti italiani mostrano un'incidenza del margine di interesse sui ricavi del 50% circa, lievemente superiore al dato riferibile alle banche francesi e tedesche (Fig. 5.1 - Fig. 5.3).
- Nello stesso periodo, l'adeguatezza patrimoniale delle maggiori banche europee è rimasta pressoché stabile. Per gli istituti italiani, al pari di quelli spagnoli e inglesi, il dato è riferibile in parte al calo della rischiosità degli attivi (Fig. 5.4).
- Con particolare riferimento alla composizione degli attivi, gli istituti di credito italiani e spagnoli si caratterizzano per una minore incidenza delle attività finanziarie al *fair value* (13% circa del totale attivo) rispetto alle banche tedesche e francesi (rispettivamente, 25% e 24%). In Italia, in particolare, tali attività sono costituite per il 64% da titoli quotati in mercati attivi (ossia di livello 1 nella gerarchia del *fair value*), a fronte di valori del 46%, 31% e 19% rispettivamente per le maggiori banche spagnole, francesi e tedesche (Fig. 5.5).
- Un altro aspetto rilevante ai fini della valutazione della qualità degli attivi è rappresentato dall'esposizione verso titoli pubblici domestici che, a fine 2021, risultava pari al 10% circa del totale attivo
- In 2021, the major European and Italian banks experienced a good trend in profitability and operating efficiency, in the wake of the global recovery. Compared to their European peers, Italian banks continue to be characterised by a lower incidence of trading income. As of March 2022, moreover, Italian banks show an interest margin as a share of revenues of around 50%, which is slightly higher than the corresponding figure for French and German banks (Fig. 5.1 - Fig. 5.3).
- In 2021, the capital adequacy of the largest banks remained more or less stable in Europe compared to the previous year. For the Italian banks, similarly to Spain and the UK ones, this was partly due to a decline in asset riskiness (Fig. 5.4).
- As regards the composition of assets, Italian and Spanish banks are characterised by a lower incidence of financial assets at fair value (around 13% of total assets) compared to German and French peers' figures (25% and 24%, respectively). In Italy, in particular, 64% of these instruments consist of securities listed on active markets (i.e. level 1 in the fair value hierarchy), compared to 46%, 31% and 19%, respectively, for the largest Spanish, French and German banks (Fig. 5.5).
- Another relevant aspect to asset quality is the exposure to domestic government bonds, which, at the end of 2021, amounted to around 10% of total assets for Italian banks, compared to

per le banche italiane, valore nettamente superiore al dato riferibile ai maggiori *competitors* europei e oscillante tra il 4% degli istituti tedeschi e il 7% delle banche spagnole (Fig. 5.6).

- Nel 2021 l'incidenza dei crediti deteriorati sul totale si è attestata su valori compresi tra il 2% per le maggiori banche tedesche e inglesi e il 3% per gli istituti spagnoli, francesi e italiani. Questi ultimi hanno sperimentato continui miglioramenti nell'ultimo triennio, anche grazie alle ingenti operazioni di cessione dei crediti dubbi condotte pure nel 2021. Le banche domestiche, tuttavia, così come quelle spagnole, mostrano una quota più pronunciata di crediti deteriorati sul totale dei crediti concessi alle imprese non finanziarie, specie per le PMI. In Italia i settori per i quali l'incidenza dei crediti deteriorati risulta più elevata sono costruzioni, real estate e servizi di alloggio e ristorazione.

values of 7%, 6% and 4% for the largest Spanish, French and German institutions (Fig. 5.6).

- In 2021, non-performing loans as a percentage of total loans ranged between 2% for the largest German and UK banks and 3% for Spanish, French and Italian institutions. The latter have experienced continuous improvements over the last three years, also thanks to the significant divestments of non-performing loans conducted also in 2021. In Italy, however, as in Spain, the share of non-performing loans on total loans granted to non-financial companies is high, especially for SMEs. In Italy, sectors with the highest NPLs ratio are constructions, real estate and accommodation and food services.



Le banche italiane, inoltre, assieme a quelle francesi, presentano la più elevata esposizione verso controparti residenti in Russia, Bielorussia e Ucraina. Il dato si riferisce soprattutto a crediti verso imprese non finanziarie e si attesta rispettivamente a 23 e 26 miliardi di euro per l'Italia e la Francia, pari rispettivamente al 26% e al 30% circa delle esposizioni delle maggiori banche europee (marzo 2022; Fig. 5.7 - Fig. 5.10).

- L'esposizione delle banche dell'area euro verso settori a elevata emissione di CO<sub>2</sub> è rimasta stabile e pari al 64% circa delle esposizioni verso imprese non finanziarie. Secondo stime della Banca d'Italia, inoltre, il 28% dei prestiti alle imprese è riferibile ad aziende localizzate in aree caratterizzate da un elevato rischio fisico (Fig. 5.11).
- Nel 2021 il tasso di crescita dei crediti bancari alle imprese non finanziarie si è progressivamente ridotto dopo il picco registrato nell'anno precedente, anche per effetto del calo della domanda. In Italia, l'incidenza di tali crediti sul totale attivo è così diminuita portandosi a maggio 2022 al 16%, un livello che rimane comunque stabilmente superiore alla media europea del 12% circa. Nello stesso periodo è invece proseguita l'espansione della crescita del credito alle famiglie, il cui peso sul totale attivo ha raggiunto il 16% circa sia in Europa sia in Italia (Fig. 5.12- Fig. 5.13).

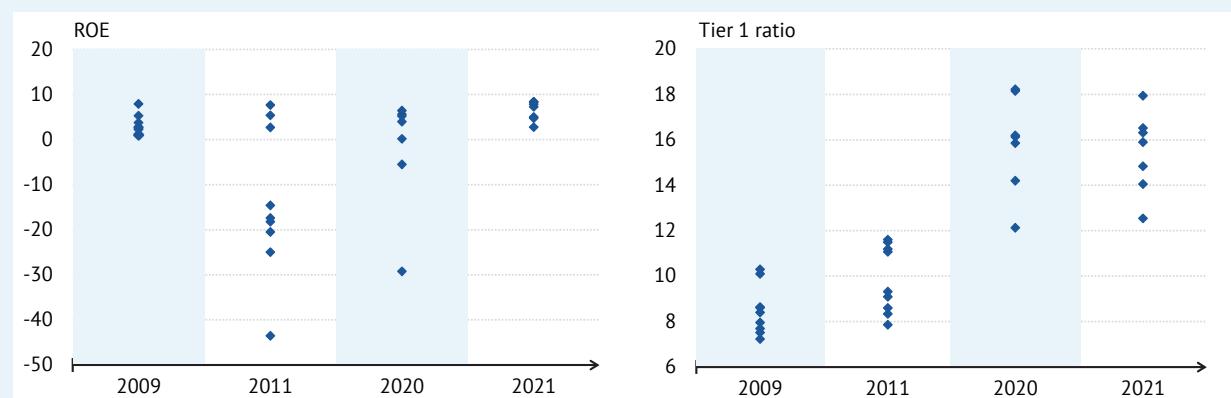
Moreover, Italian banks, together with French banks, show the highest exposure to counterparties resident in Russia, Belarus and Ukraine. This exposure, consisting mainly of loans to non-financial corporations, stood at EUR 23 billion in Italy and EUR 26 billion in France, accounting for approximately 26% and 30% of the exposures of the largest European banks respectively (data as of March 2022; Fig. 5.7 - Fig. 5.10).

- The exposure of euro area banks to high-carbon sectors remained stable at about 64% of exposures to non-financial corporations. Moreover, according to Bank of Italy estimates, 28% of corporate loans are to companies located in areas characterised by high physical risk (Fig. 5.11).
- In 2021, the growth rate of bank loans to non-financial corporations gradually decreased after peaking in the previous year, partly due to falling demand. In Italy, the ratio of these loans to total assets fell till 16%, a level that remains steadily above the European average of around 12% (as of May 2022). In contrast, bank loans to households keep recording positive growth rates, with a ratio to total assets hitting 16% in both Europe and Italy (Fig. 5.12- Fig. 5.13).

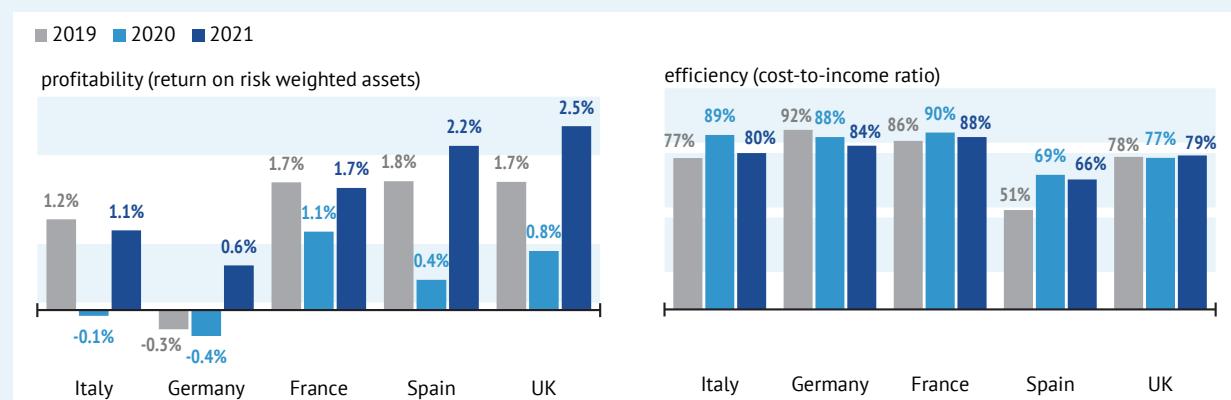
- Quanto alla composizione dei crediti, nel confronto con i maggiori paesi europei, le banche italiane e quelle tedesche si caratterizzano per una maggiore esposizione verso le imprese non finanziarie (alle quali è ascrivibile rispettivamente il 56% e il 60% dei crediti al settore privato). In ambito domestico, inoltre, è più elevato il dato riferibile alle PMI (pari al 23% dei crediti al settore privato). Rispetto ai *competitors* europei, infine, gli istituti italiani risultano maggiormente esposti verso il settore manifatturiero, seguito dai settori dei trasporti e immobiliare (Fig. 5.14).
- Sul lato della raccolta, per le banche italiane nel 2021 è proseguito il calo delle obbligazioni e il concomitante incremento dei depositi della clientela. Il rifinanziamento presso l'Eurosistema è rimasto ai massimi storici anche a fronte dei tassi molto convenienti applicati alle operazioni a più lungo termine (TLTRO; Fig. 5.15 - Fig. 5.16).
- As regards the composition of loans, Italian and German banks are characterised by a higher share of loans granted to non-financial firms (56% and 60% of loans to the private sector, respectively). In Italy, the proportion of loans granted to SMEs is higher than in the other major European countries (23% of loans to the private sector). Finally, Italian institutions are most exposed to the manufacturing sector, followed by the transport and real estate sectors (Fig. 5.14).
- As for funding, the decline in bonds and the concomitant increase in customer deposits continued for Italian banks in 2021. Refinancing with the Eurosystem remained at an all-time high, due also to the favourable rates applied to the longer term operations (TLTRO; Fig. 5.15 - Fig. 5.16).

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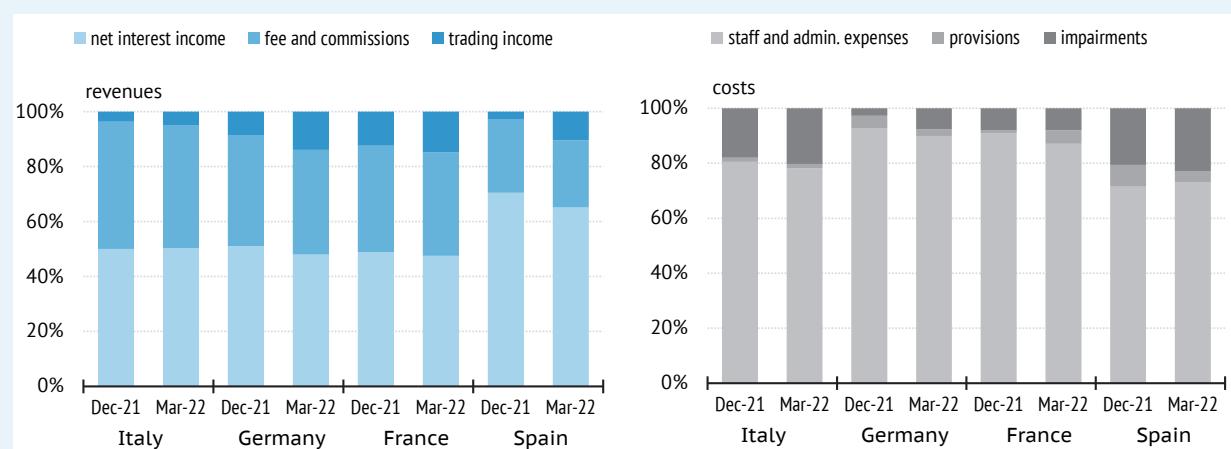
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**Fig. 5.1 – Profitability and capital adequacy of the major Italian banking groups**

Source: calculations on data from consolidated annual and interim reports of the 8 largest groups.

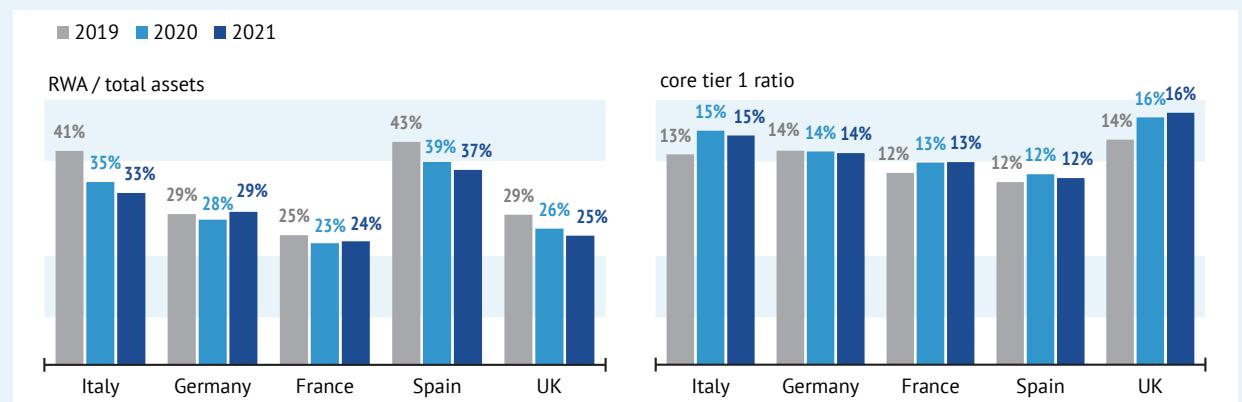
**Fig. 5.2 – Profitability and efficiency of the major banks in the main European countries**

Source: calculations on Refinitiv data. Figures refer to a sample of 31 major European banks located in Italy (10 banks), Germany (4), France (5), Spain (6) and UK (6).

**Fig. 5.3 – Composition of revenues and costs of the major banks in the main euro area countries**

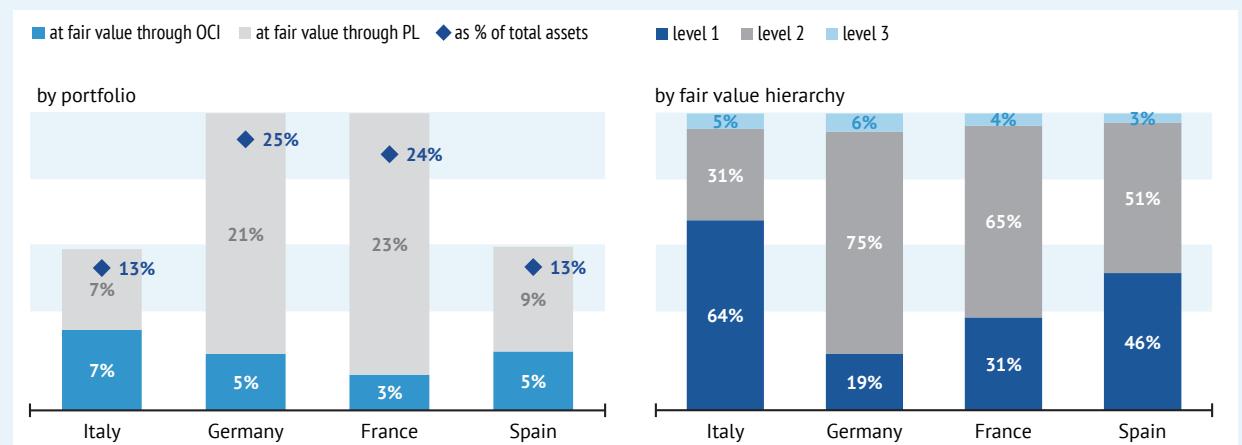
Source: EBA Risk Dashboard, June 2022.

**Fig. 5.4 – Capital adequacy and leverage of the major banks in the main European countries**



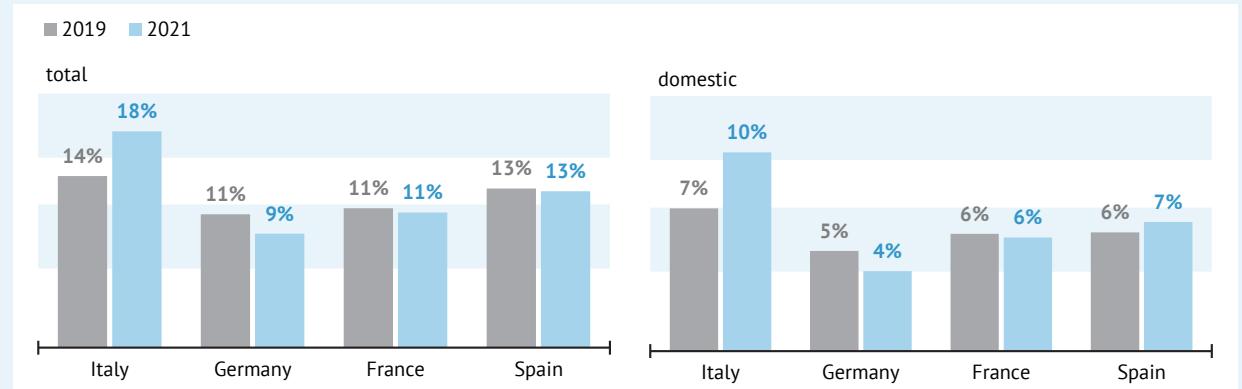
Source: calculations on Refinitiv data. See note to Fig. 5.2 for details on the banks included in the sample.

**Fig. 5.5 – Financial assets at fair value of the major banks in the main euro area countries**  
(data as of March 2022)

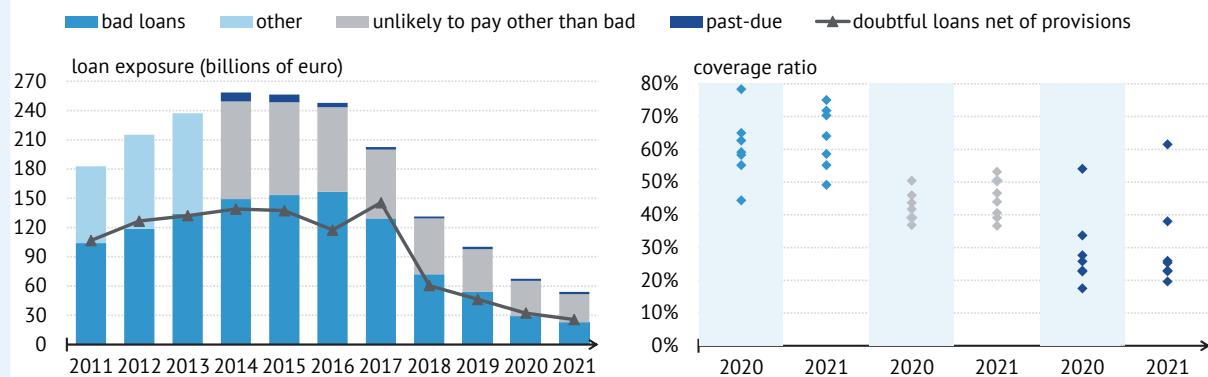


Source: EBA Risk Dashboard, June 2022.

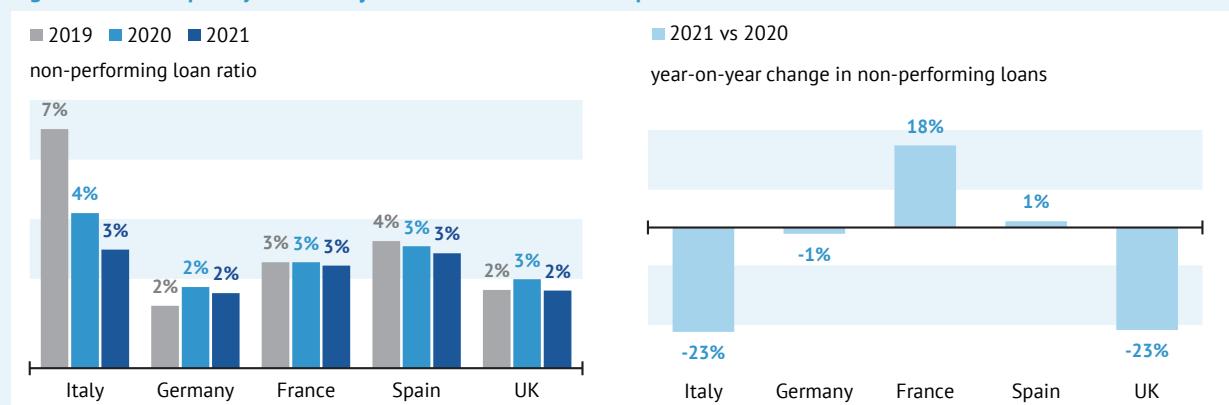
**Fig. 5.6 – Sovereign bonds holdings of the major banks in the main euro area countries**  
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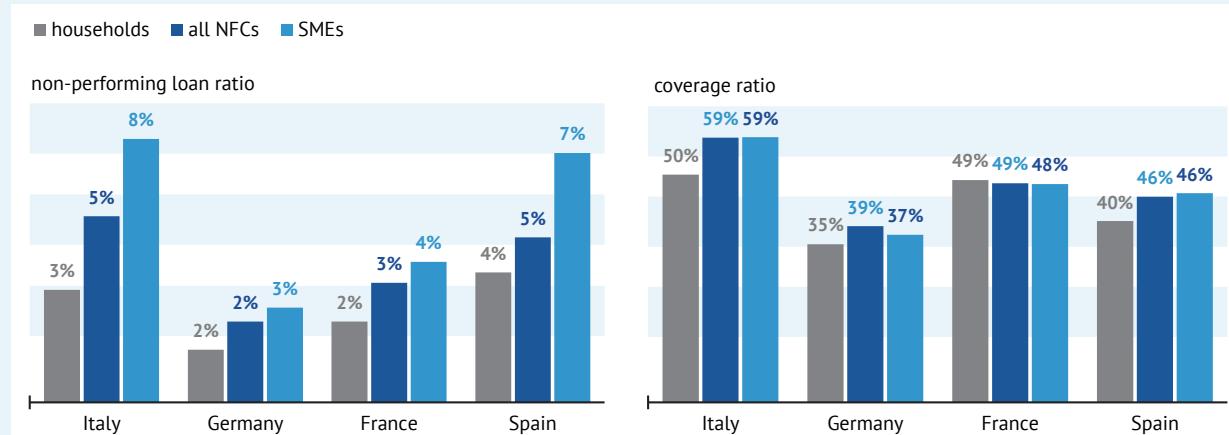
Source: calculations on EBA Risk Dashboard, June 2022.

**Fig. 5.7 – Credit quality of major Italian banking groups**

Source: calculations on data from consolidated annual and interim reports of the 8 largest groups. Since the first quarter of 2015 the classification of loans into risk classes has been updated pursuant to Bank of Italy Circular 272 (see also section A.2 Accounting Policies of Explanatory Notes); this update adjusts the previous classification instructions to the definition of "Non-Performing Exposure" (NPE) introduced by the European banking authority (EBA) through the issue of EBA/ITS /2013/03/rev124/7/2014. Loans classified in the previous categories that made up the perimeter of impaired loans as of December 31, 2014 (Bad Loans, Doubtful, Restructured, Past-due) were reallocated to new risk classes (Bad Loans, Unlikely to pay other than bad, Past-due).

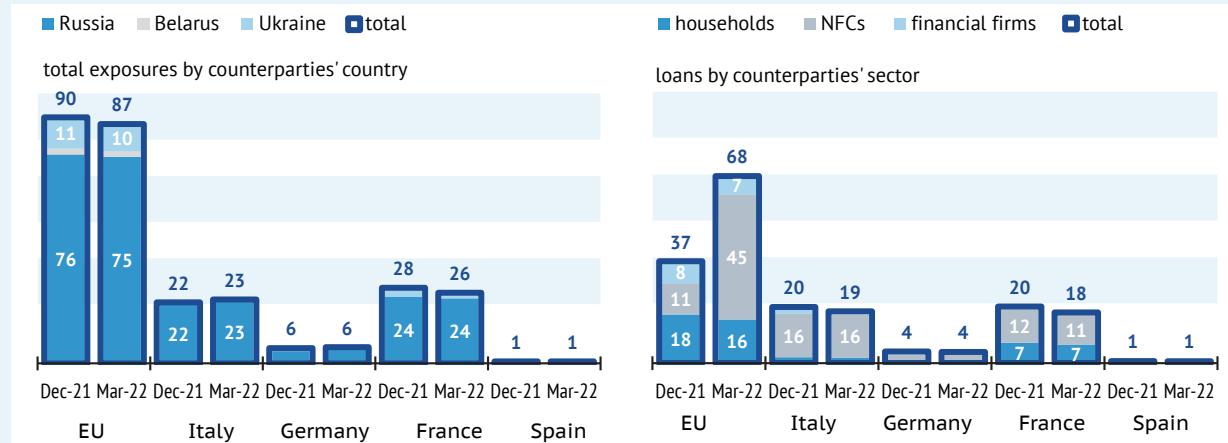
**Fig. 5.8 – Credit quality of the major banks in the main European countries**

Source: calculations on Refinitiv data. See note to Fig. 5.2 for details on the banks included in the sample.

**Fig. 5.9 – Non-performing loans of the major banks in the main euro area countries by type of counterparty**  
(data as of March 2022)

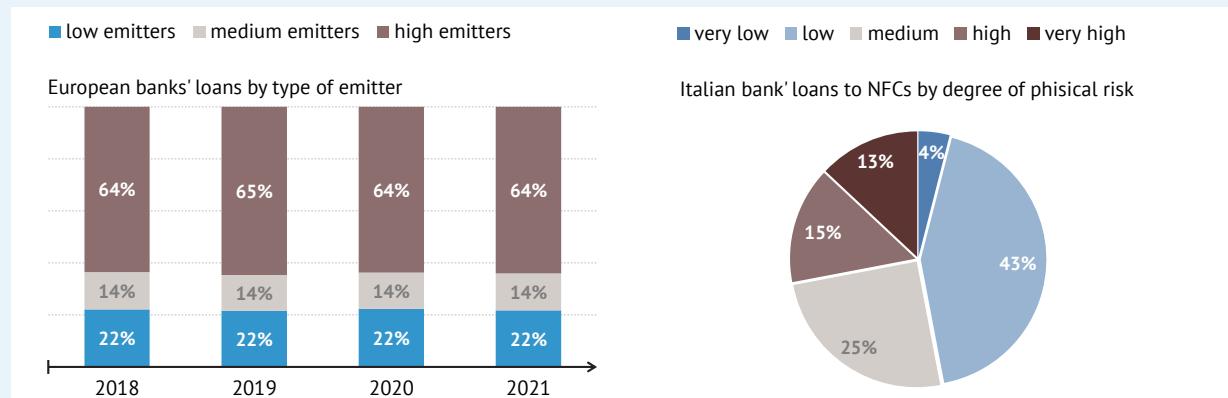
Source: EBA Risk Dashboard, June 2022. Figures include loans and advances at amortised costs only.

**Fig. 5.10 – European banks' exposure to Russian, Belarusian and Ukrainians counterparties**



Source: EBA Risk Dashboard, June 2022.

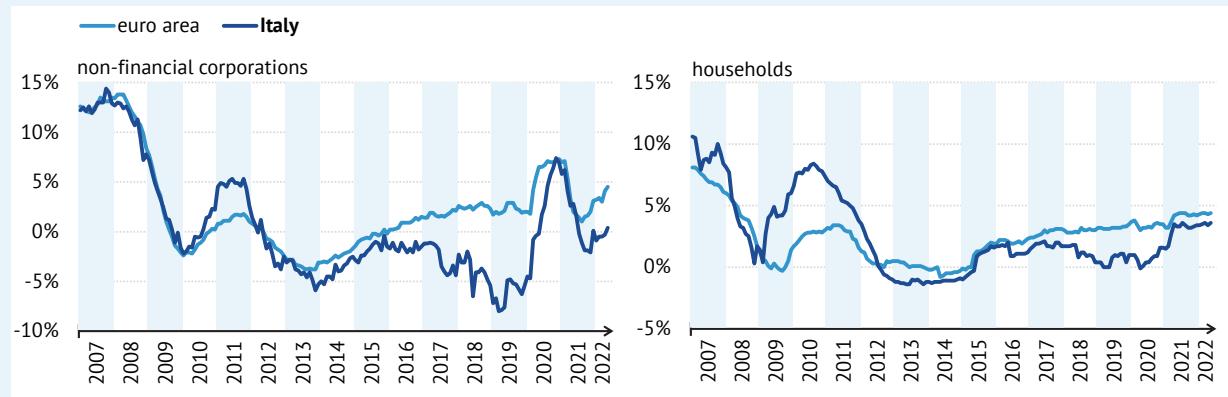
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Source: ECB Financial Stability Review May 2022 and Bank of Italy Financial Stability Report April 2022.

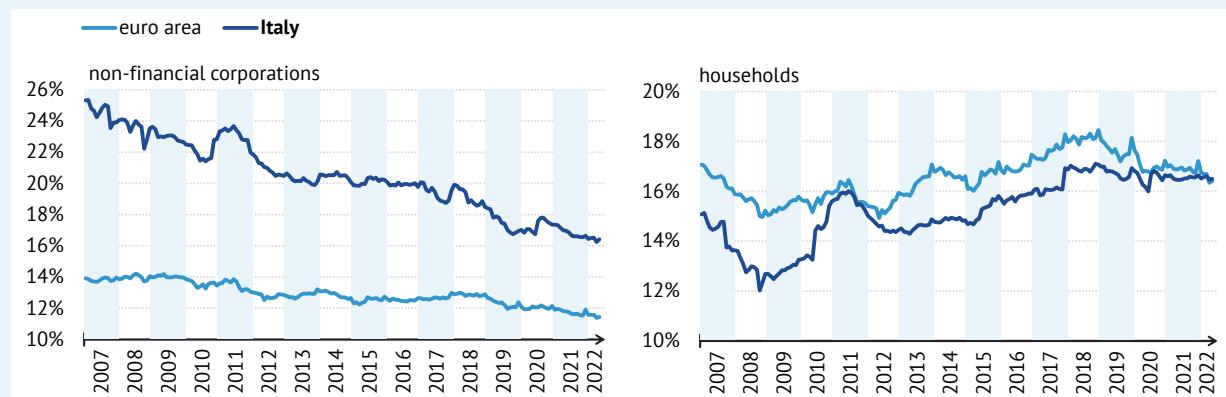
**Fig. 5.12 – Annual growth rate of loans to non-financial corporations and households**

(monthly data up to May 2022)



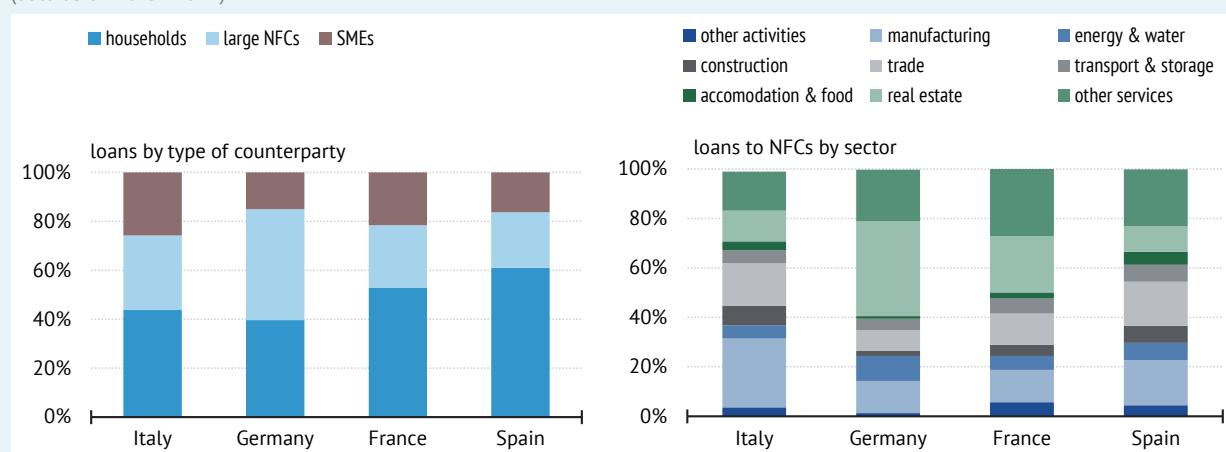
Source: ECB.

**Fig. 5.13 – Loans to non-financial corporations and households as percentage of total assets**  
(monthly data up to May 2022)



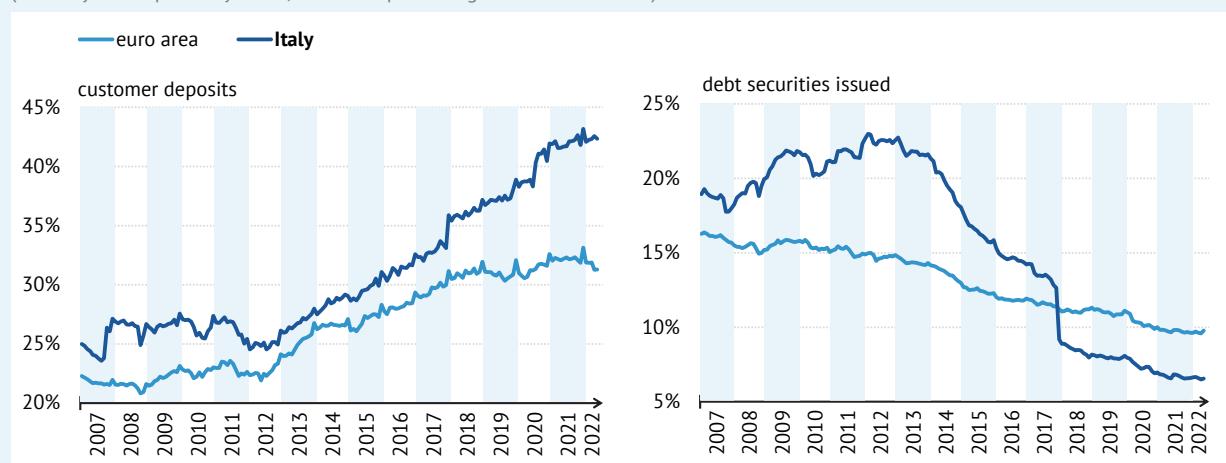
Source: calculations on ECB data.

**Fig. 5.14 – Composition of loans to the private sector of the major banks in the main euro area countries**  
(data as of March 2022)



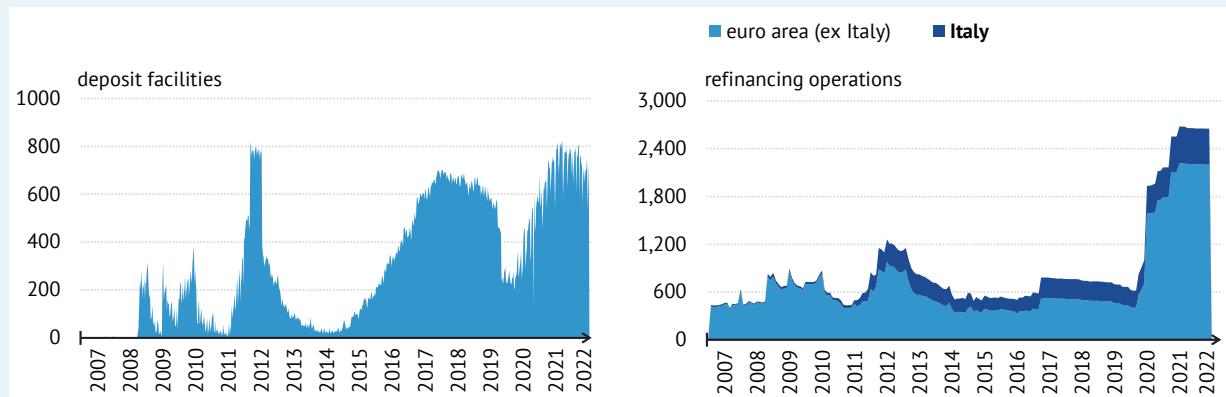
Source: calculations on EBA Risk Dashboard, June 2022.

**Fig. 5.15 – Trends in banks' funding in the euro area**  
(monthly data up to May 2022; values as percentage of total liabilities)



Source: calculations on ECB data.

**Fig. 5.16 – Deposit liabilities and refinancing operations of the European banks with the Eurosystem**  
(monthly data up to May 2022; amounts in billions of euro)



Source: Refinitiv Datastream.

