

Statistics and analyses

The Covid-19 crisis

Impacts and risks for the Italian financial system in a comparative perspective



CONSOB
COMMISSIONE NAZIONALE
PER LE SOCIETÀ E LA BORSA

July 2020

The Occasional Report series includes in-depth analyses on issues of CONSOB's institutional interest.

This Report examines the economic impacts of the Covid-19 crisis.

This Report was prepared by:

Nadia Linciano (coordinator)

Valeria Caivano

Francesco Fancello

Monica Gentile

The authors wish to thank Lucia Pierantoni for her contribution to the analysis of the Italian banks.

The opinions expressed in this Report are the authors' personal views and are in no way binding on Consob.

Full or partial copying, distribution and reproduction of this Report is subject to prior written authorisation by Consob.

Editorial secretary: Eugenia Della Libera

For information and clarifications write to:
studi_analisi@consob.it.

CONSOB

00198 Roma

Via G.B. Martini, 3

t 06.8477.1

f 06.8477612

e studi_analisi@consob.it

July 2020

1. Economic impact and policy responses
2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

Executive summary

The present Report analyses the economic impact of the Covid-19 pandemic as of the first semester of 2020 both in the domestic and in the international framework. Some analysis are updated to September and October 2020. The pandemic is a shock exogenous to the economic and the financial system, that symmetrically hit the supply and the demand side. It has also spread asynchronously over the globe, thus contributing to the persistence of its economic consequences. Many uncertainties about its severity and length make it difficult to forecast the development of the crisis, although it is clear that financial markets and the bank sector may become an amplifier of the shock and that pre-existent vulnerabilities as well as policy measures will be key to defeat the crisis. At the upsurge of the Covid-19 disease, Italy was already experiencing a weak economic growth; Italian non-financial, listed firms were showing a profitability growth lower than their European peers; domestic stock market has never recovered the levels achieved before the 2008 global financial crisis. At the same time, public deficit was under control as well as the conditions prevailing on sovereign debt markets; Italian banks were more resilient than they were in the past; households remained characterised by low debt levels and a high ratio of financial wealth to disposable income.

The lockdown introduced in Italy last March as a containment measure of the pandemic has severely affected both the supply side and the demand side of the economy. Similar, although lower, effects were recorded in the major Eurozone countries. During the first term of 2020, both domestic and foreign financial markets experienced heightened turmoil and recorded severe losses only partially recovered in the following months thanks to the unprecedented policy measures adopted in the euro area and at the domestic level.

Overall, the pandemic poses many downside risks to economic recovery, also because of the escalation of new Covid-19 cases across countries. The crisis also delivers some important lessons. First, policy makers need timely forecast of macroeconomic and financial risks, which only innovative analysis based on real-time and high frequency data may grant. Second, international cooperation is key, given the global dimension of the crisis and the looming risks driven by increasing geopolitical tensions and by a no-deal Brexit. Third, the pandemic is accelerating digitalisation of financial services and sustainable and responsible investments, that might require an update in the regulatory agenda.

The Covid-19 crisis is deeply changing and will probably keep changing the economic and social framework. Both financial markets regulators and supervisors, as well as policy makers in general, need to develop tools and skills allowing a timely action whereas required by rapidly evolving conditions. The data driven approach already prompted by the 2008 global financial crisis need to be strengthened further, also through the application of investigation methods based on data science and data analytics.

1. Economic impact and policy responses

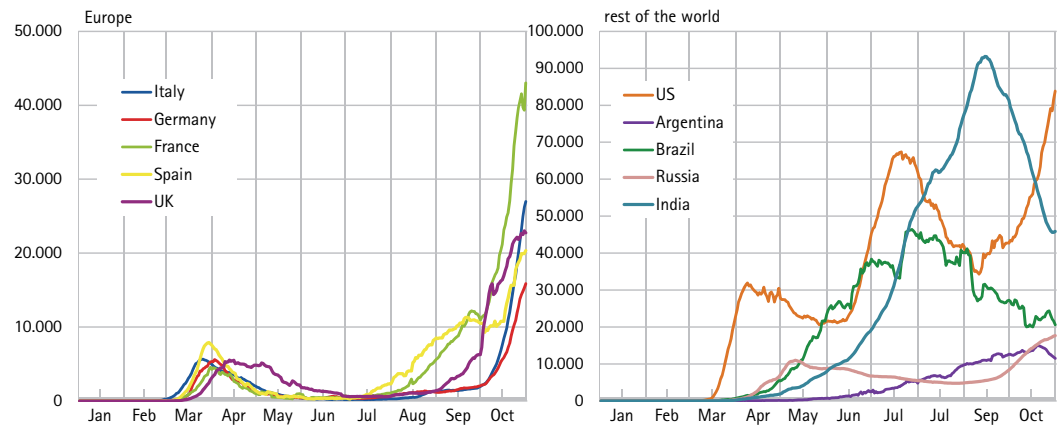
2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

Economic impact and policy responses

In the first quarter of 2020 the Covid-19 pandemic severely hit many countries ...

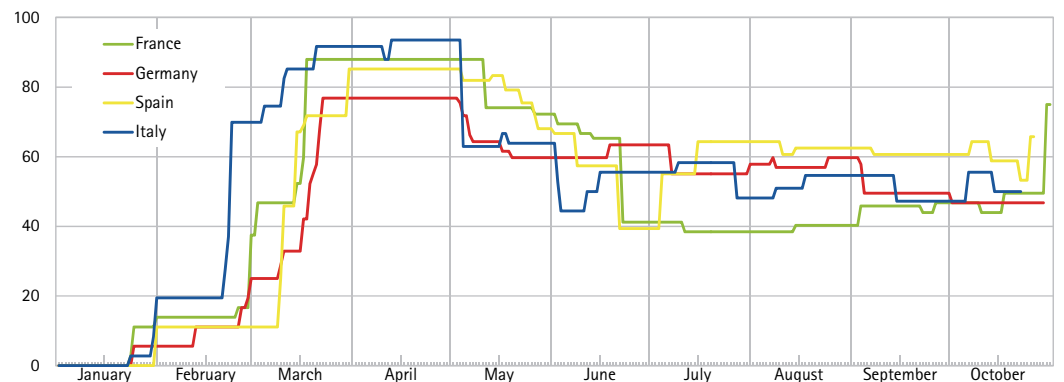
... and prompted containment measures that in Italy were more stringent and prolonged.

Fig. 1 – Reported Covid-19 cases in the selected countries in 2020
(7 days-moving average)



Source: European Centre for Disease Prevention and Control.

Fig. 2 – Government Response Stringency Index in the main euro area countries
(daily data; 1st January 2020 - 30 October 2020)



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>. The Government Response Stringency Index is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). The value of the Index varies between 0 and 100 where 100 indicates the highest degree of restriction on social and economic activity.

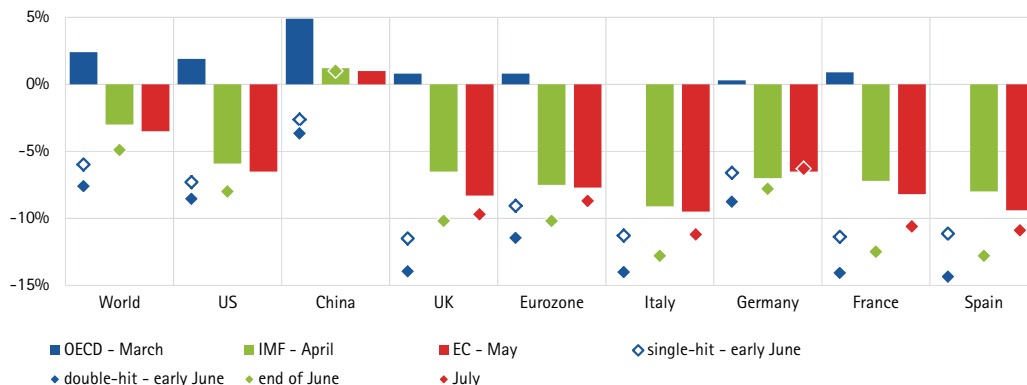
1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

The extraordinary decline in the economic activity expected in 2020 should be followed by ...

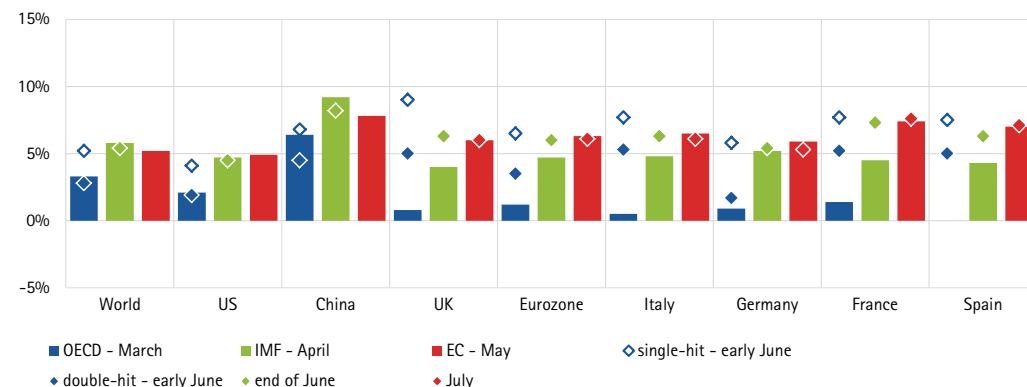
Fig. 3 – 2020 GDP growth forecast



Source: European Commission (2020a; 2020b); IMF (2020a, 2020b); OECD (2020a, 2020b). As for the OECD estimates (2020b), the figure reports two alternative scenarios: the 'single-hit' scenario based on the hypothesis that a second wave of infections is avoided, and the 'double-hit' scenario, based on the hypothesis that a second wave of infections hits before the end of 2020.

... a robust recovery in 2021.

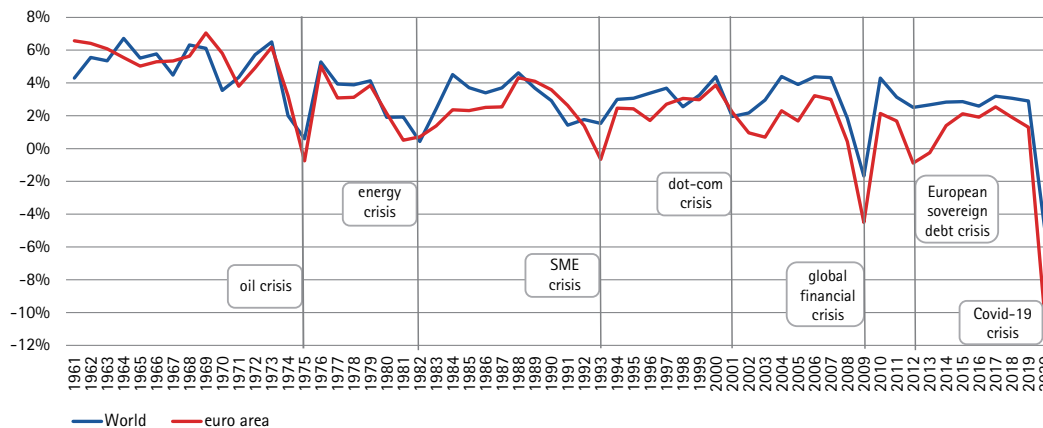
Fig. 4 – GDP growth estimates in 2021 published by the main international institutions



Source: European Commission (2020a; 2020b); IMF (2020a, 2020b); OECD (2020a, 2020b). As for the OECD estimates (2020b), the figure reports two alternative scenarios: the 'single-hit' scenario based on the hypothesis that a second wave of infections is avoided, and the 'double-hit' scenario, based on the hypothesis that a second wave of infections hits before the end of 2020.

The COVID-19 pandemic is prompting the worst-ever recession in the last decades, ...

Fig. 5 – Global and euro area annual growth rate of GDP (1961-2020; percentage year-on-year change)



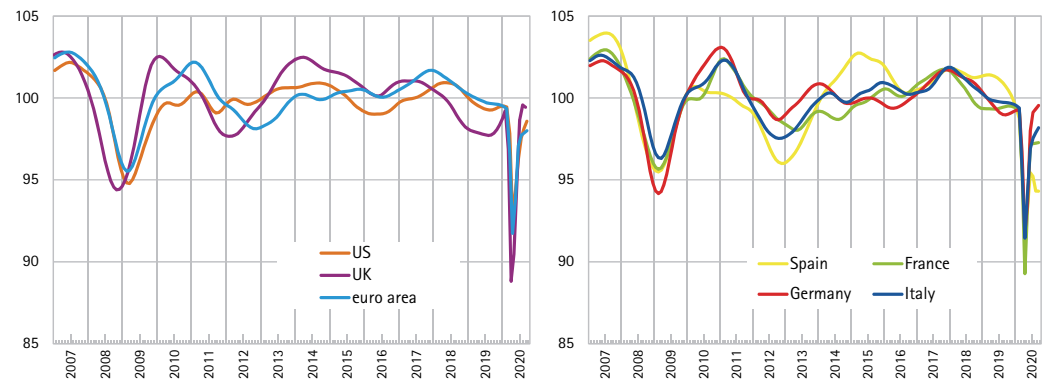
Source: World Bank for data until 2018; IMF (2020b) for 2019 and 2020 estimate.

1. Economic impact and policy responses

2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

... as shown also by the OECD leading indicators, ...

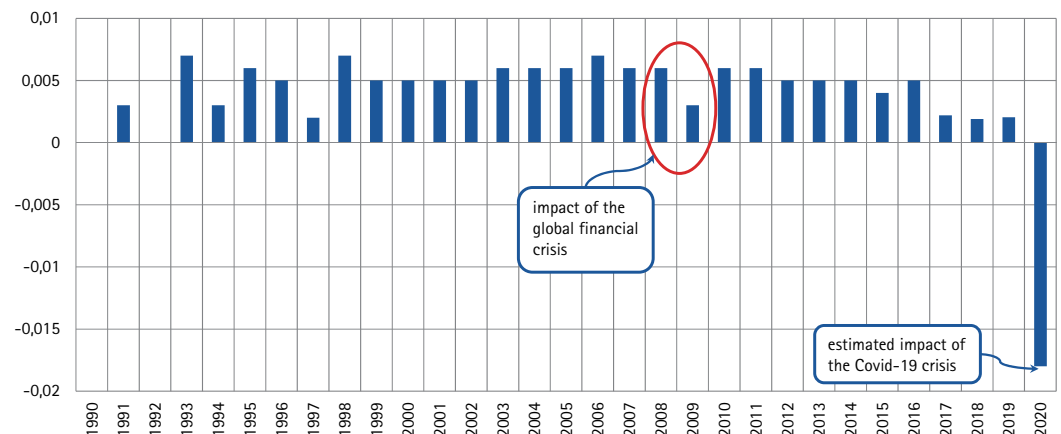
Fig. 6 – OECD composite leading indicators in the main advanced countries
(monthly data; January 2007 – September 2020)



Source: OECD (2020c). The OECD composite leading indicators are designed to provide early signals of turning points in business cycles showing fluctuation of the economic activity around its long term potential level. CLIs show short-term economic movements in qualitative rather than quantitative terms.

...as it hits hard on income, health and education.

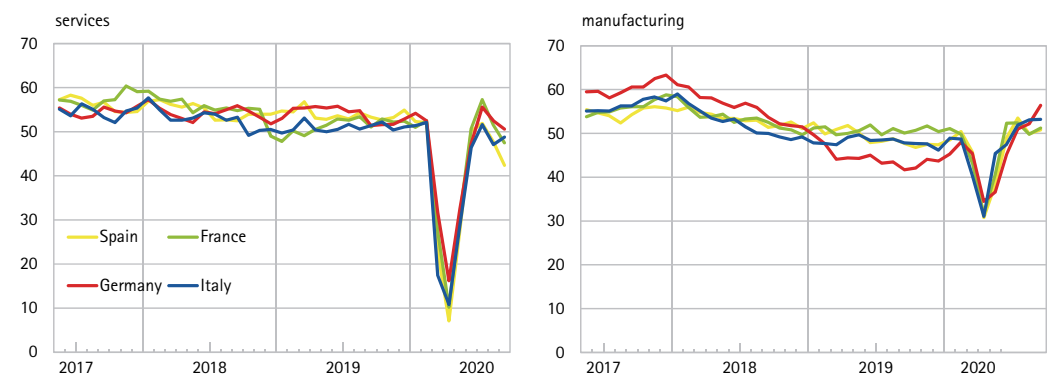
Fig. 7 – Annual change in the Human Development Index
(absolute year-on-year change)



Source: United Nations Development Programme. The figure for 2019 is provisional; the figure for 2020 is adjusted to consider the impact of Covid-19 crisis.

In the euro area, trends in PMI indexes highlighted a positive expectations in the second term of the year ...

Fig. 8 – PMI indexes in the main euro area countries
(monthly data; May 2017 – September 2020)



Source: Refinitiv Datastream.

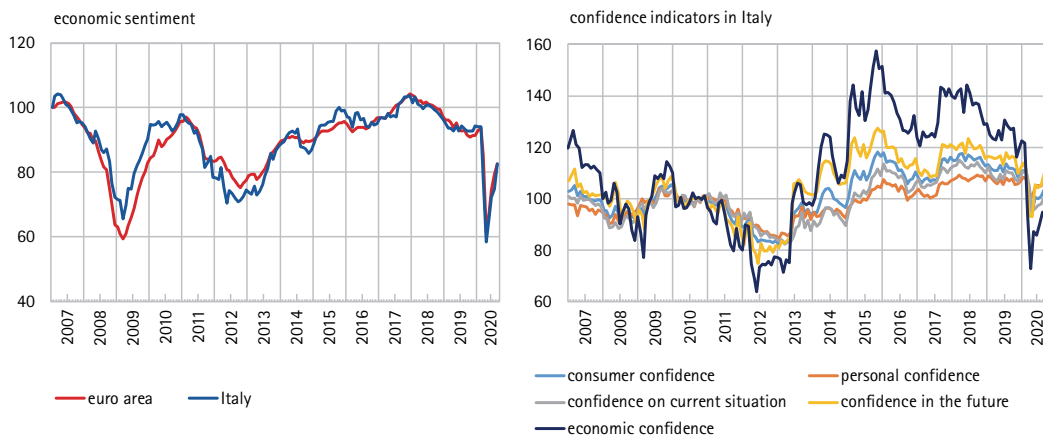
July 2020

1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

... although sentiment indicators remained subdued mirroring also...

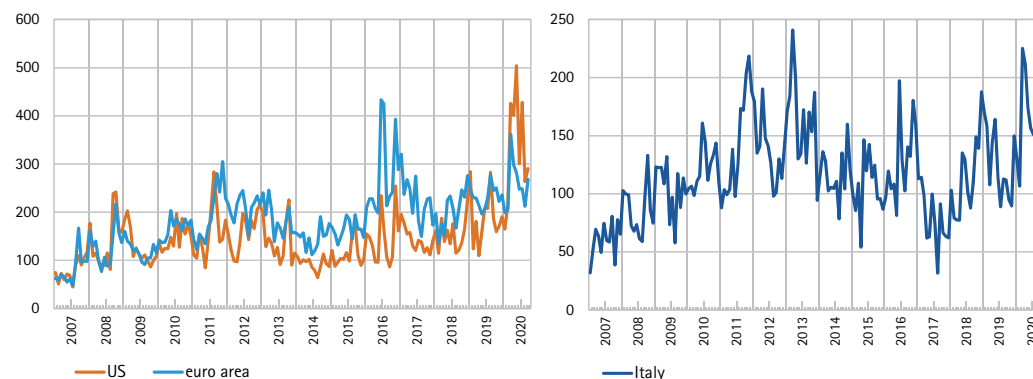
Fig. 9 – Sentiment indicators
(monthly data; January 2007 – September 2020)



Source: European Commission-DG ECFIN and Istat.

... heightened uncertainty about economic policy stance.

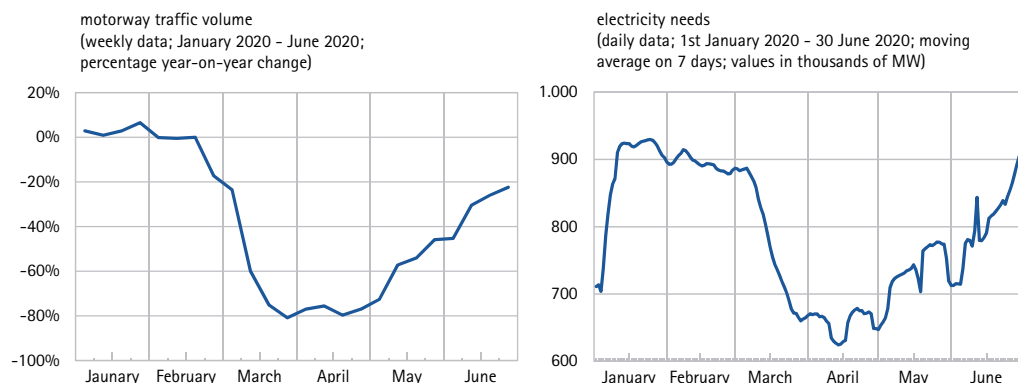
Fig. 10 – Economic policy uncertainty indicators in US and in Europe
(monthly data; January 2007 – September 2020)



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 Pais for Spain, and The Times of London and Financial Times for the United Kingdom.

In Italy the lockdown was severe, as showed by various indicators such as motorway traffic volume, electricity demand, ...

Fig. 11 – Motorway traffic volume and electricity needs in Italy



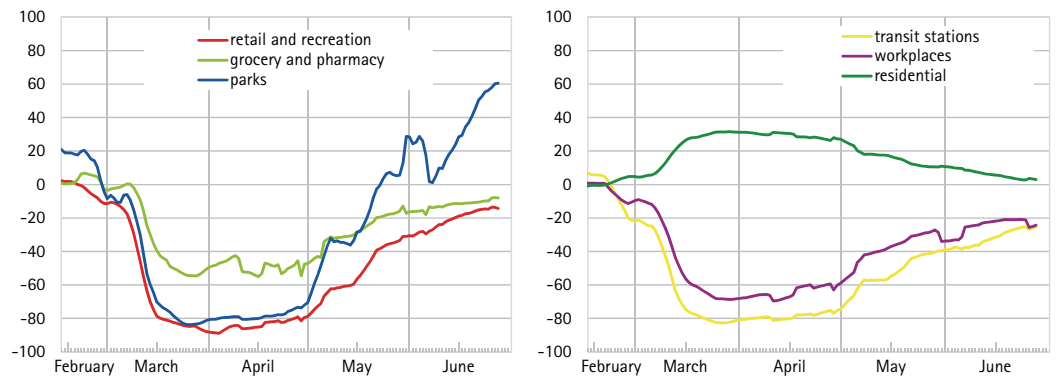
Source: Atlantia for weekly motorway traffic volume (ASPI data); Terna for daily electricity needs.

1. Economic impact and policy responses

2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

... data on individual mobility and...

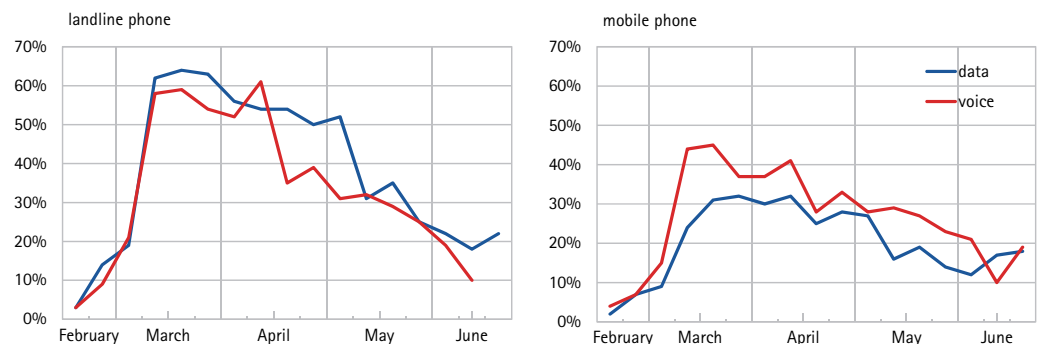
Fig. 12 – Trends in visits in selected places in Italy
(daily data; 12 February 2020 – 30 June 2020; percentage change compared to a baseline value)



Source: Google Community Mobility Report. Changes for each day are compared to a baseline value for that day of the week. The baseline is the median value, for the corresponding day of the week, during the 5-week period from 3 January 2020 to 6 February 2020.

...increase in data and voice traffic volume.

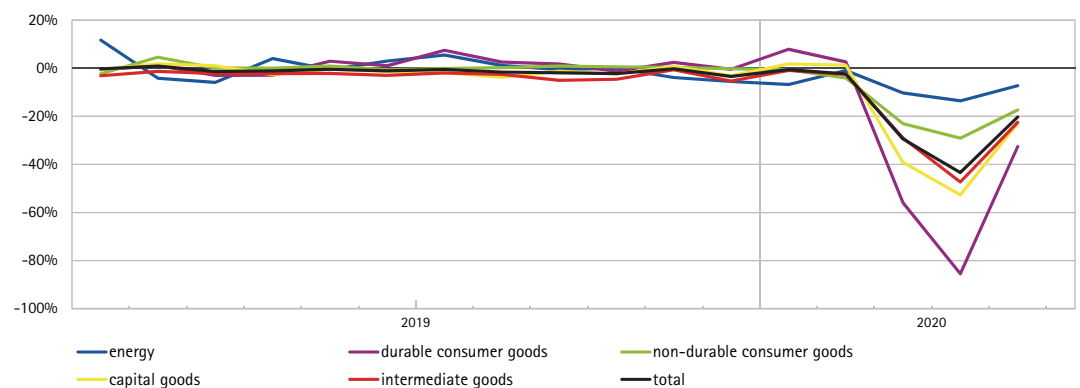
Fig. 13 – Trends in volume of data and voice traffic through mobile and landline phone in Italy
(weekly data; 17 February 2020 – 30 June 2020; percentage values)



Source: AGCOM, Weekly communications on data and voice traffic monitoring. Changes in volume are calculated with respect to volumes recorded in the week from 10 February 2020 to 16 February 2020.

Italian industrial production plummeted during the lockdown, also as a result of ...

Fig. 14 – Trends in the Italian industrial production
(monthly data seasonally adjusted; January 2019 – May 2020; year-on-year change)



Source: Istat.

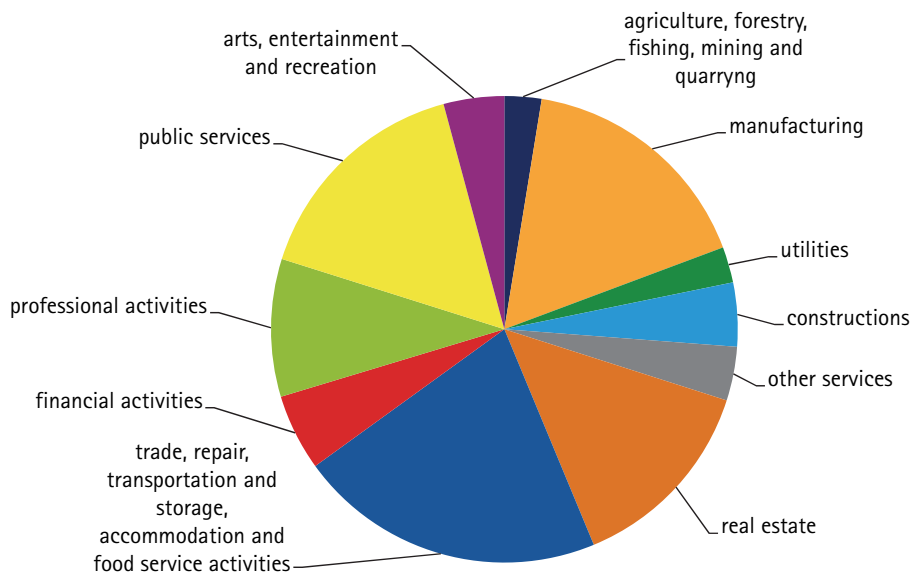
1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

... the structural characteristics of the Italian economy, whose value added relies on sectors mostly affected by the containment measures and...

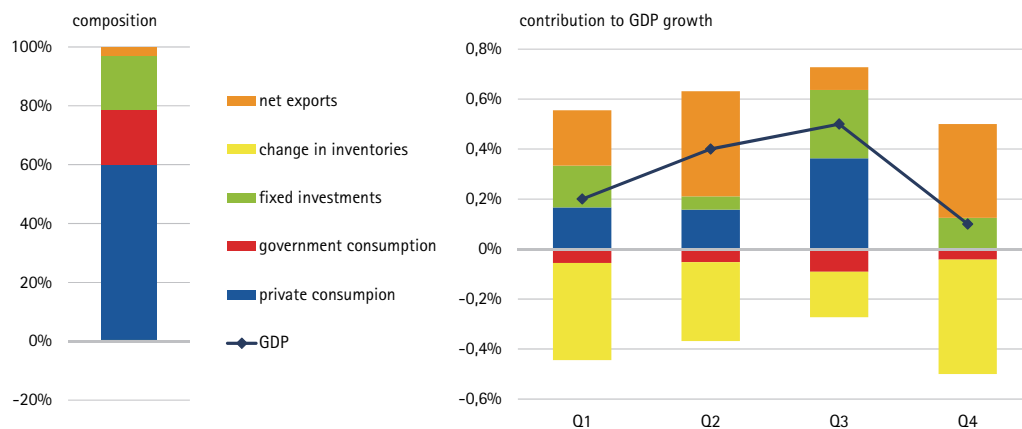
Fig. 15 – Contribution of the economic sectors to the total Italian value added in 2019



Source: Istat.

...on net exports.

Fig. 16 – Italian GDP in 2019: composition and contribution to growth of the different components



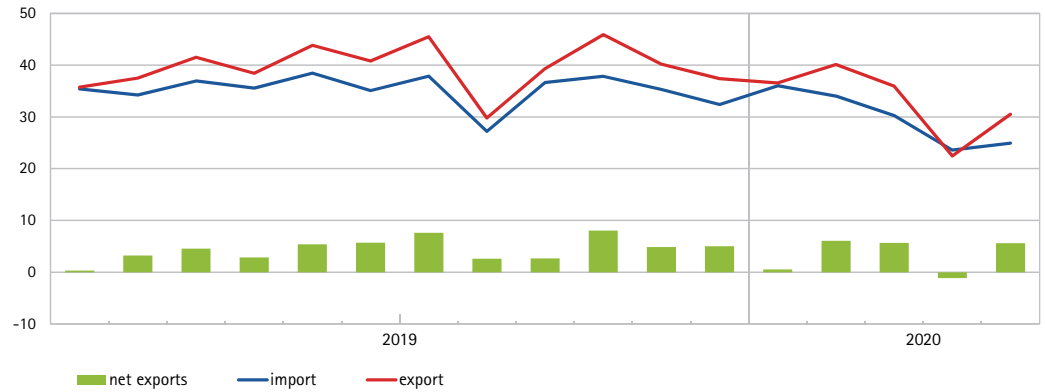
Source: Istat.

1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

The international trade was severely hit by the mobility restrictions.

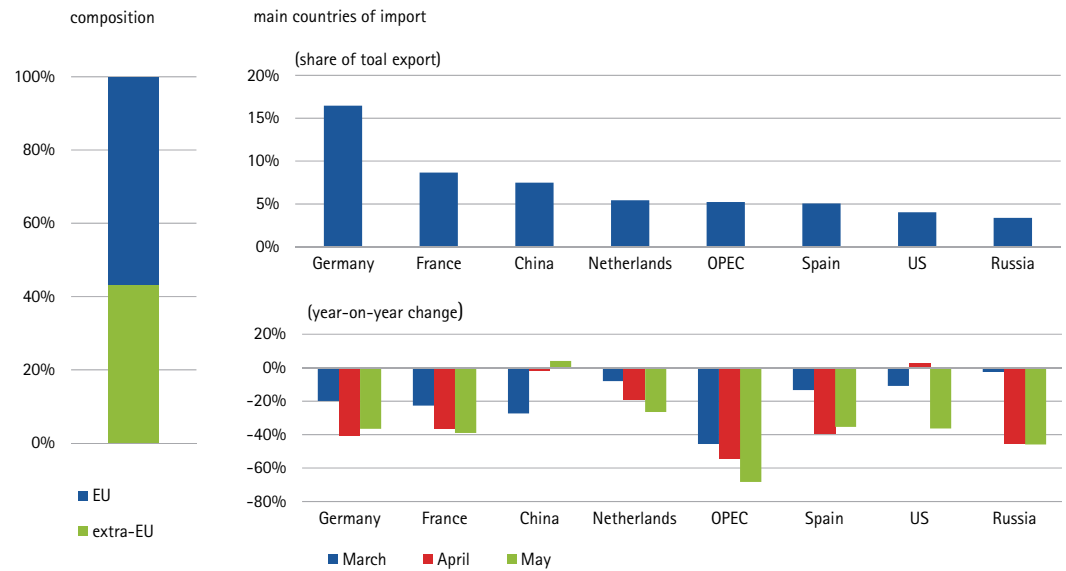
Fig. 17 – Trends in the Italian international trade
(values in billions of euro)



Source: Istat.

The Italian imports decreased sharply and ...

Fig. 18 – Main markets for the Italian imports in 2020



Source: Istat.

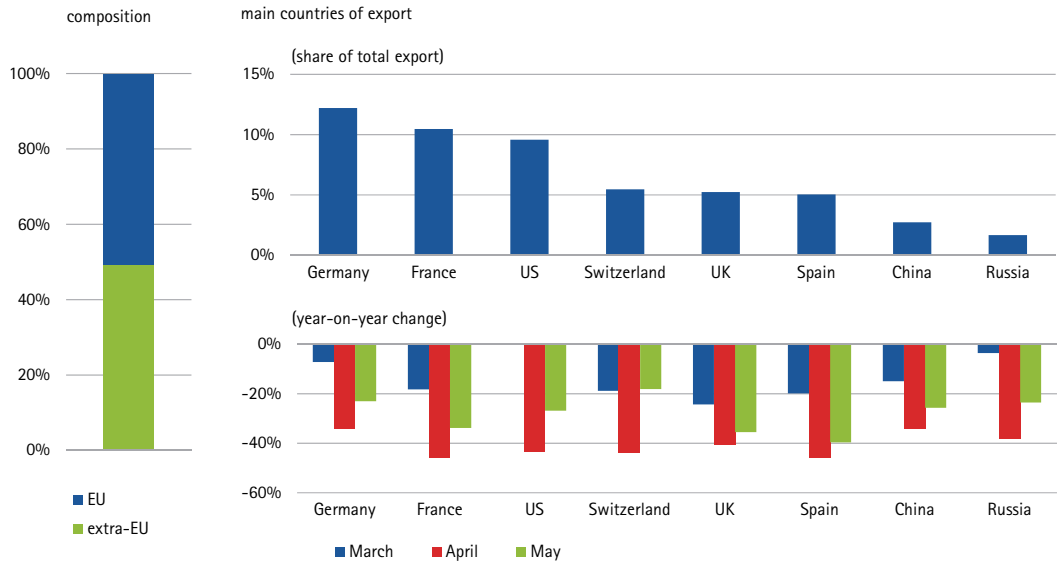
1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

... the Italian exports decreased even more.

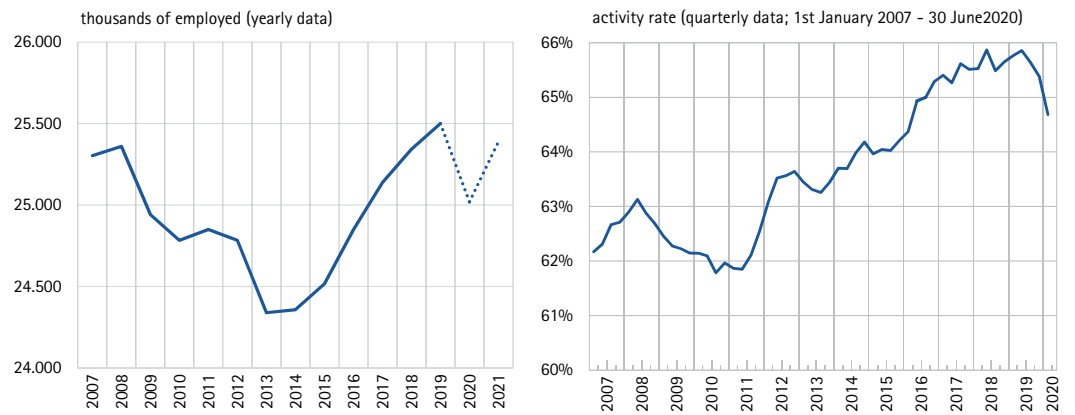
Fig. 19 – Main markets for the Italian exports in 2020



Source: Istat.

Employment declined sharply, as well as the proportion of the active population.

Fig. 20 – Employed and trends in the active population



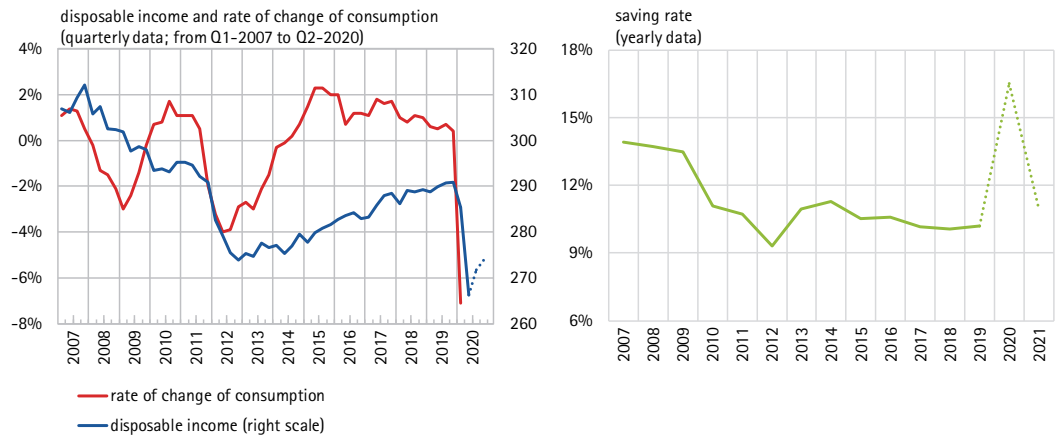
Source: European Commission DG – ECFIN, Eurostat. The activity rate in the right graph is computed as the ratio between the workforce (employed and unemployed) and population of 15 years-old or more.

1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

Not surprisingly, household disposable income decreased significantly.

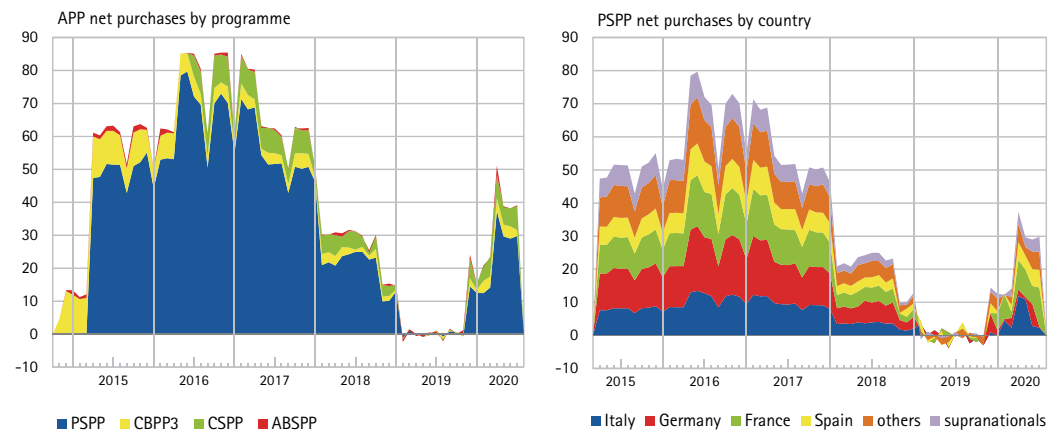
Fig. 21 – Disposable income, consumption and saving rate of the households
(amounts in billions of euro)



Source: Eurostat, Oxford Economics, European Commission DG ECFIN. The right graph shows the gross saving rate, computed as the share of gross disposable income not used for consumption.

With regard to the monetary policy, in the euro area the unique policy instruments available to the ECB were the unconventional open market operations ...

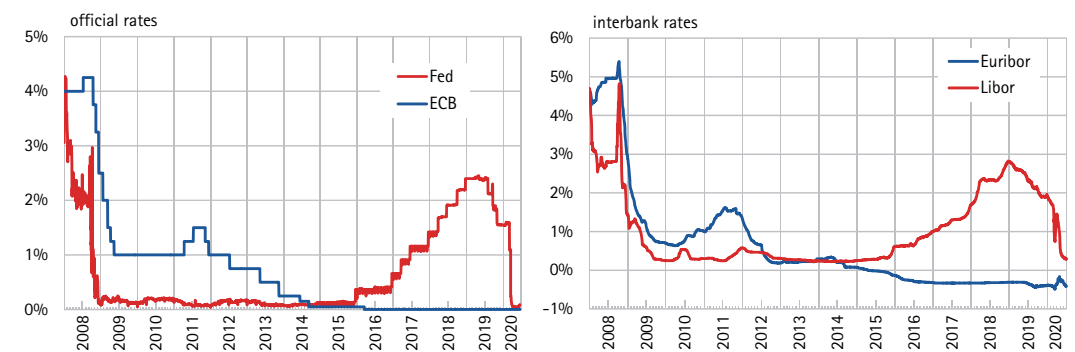
Fig. 22 – Net purchases of securities by the ECB
(monthly data updated to June 2020; amounts in billions of euro)



Source: ECB. Figures do not include the operations carried out under the PEPP, for which only the aggregate value of purchases is available.

... as the level of interest rates has remained very low since 2014 ...

Fig. 23 – Interest rates in the US and in the euro area
(daily data; 1st January 2008 - 30 June 2020)



Source: Refinitiv Datastream. The official rates are for Fed, the federal funds rate and for the ECB the main refinancing operations rate. The interbank interest rates Euribor and Libor refer to the rates on the 3-months maturity.

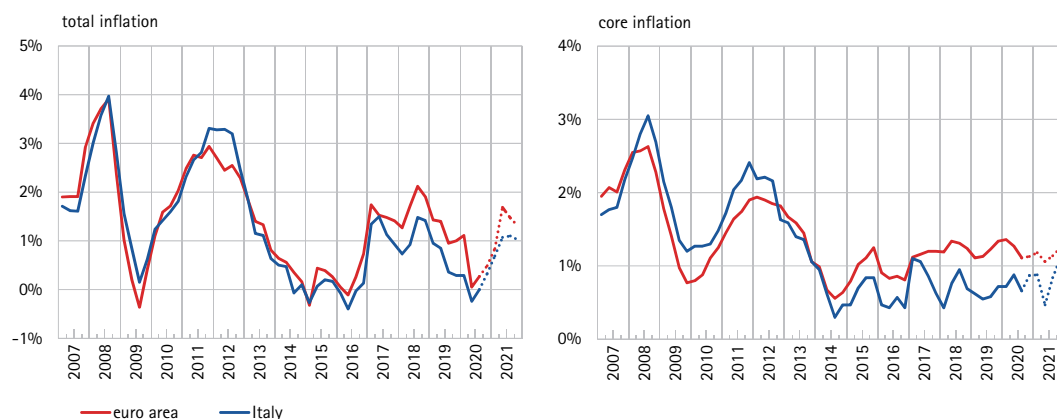
1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

... with the inflation rate widely below the ECB target.

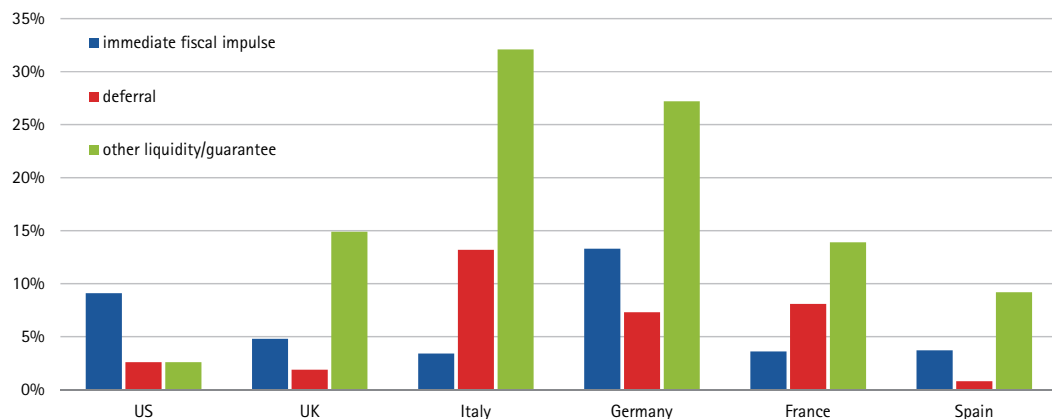
Fig. 24 – Inflation rate in the euro area and in Italy (growth rate in percentage value; quarterly data)



Source: Oxford Economics. For the period June 2020 - December 2021 figures are estimated.

Given the unprecedented fiscal stimulus to the real economy ...

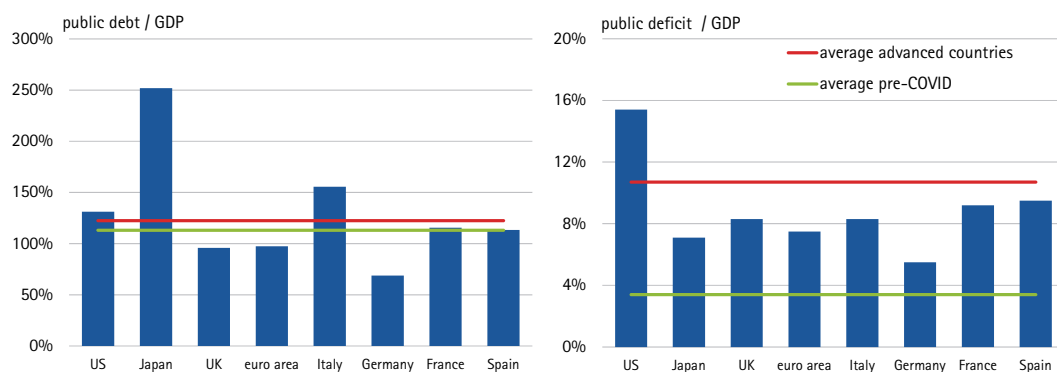
Fig. 25 – Fiscal measures adopted to support real economy in selected advanced countries (in percentage of 2019 GDP)



Source: Bruegel (2020a). Figures do not include the suspension or the cancellation of planned public investments, equivalent to a negative fiscal stimulus. Figure for Italy is updated to 22 June 2020.

... public finances are expected to experience a severe deterioration in the main advanced countries and ...

Fig. 26 – Expected public debt and deficit to GDP of the main advanced countries in 2020 (as percentage of 2019 GDP)



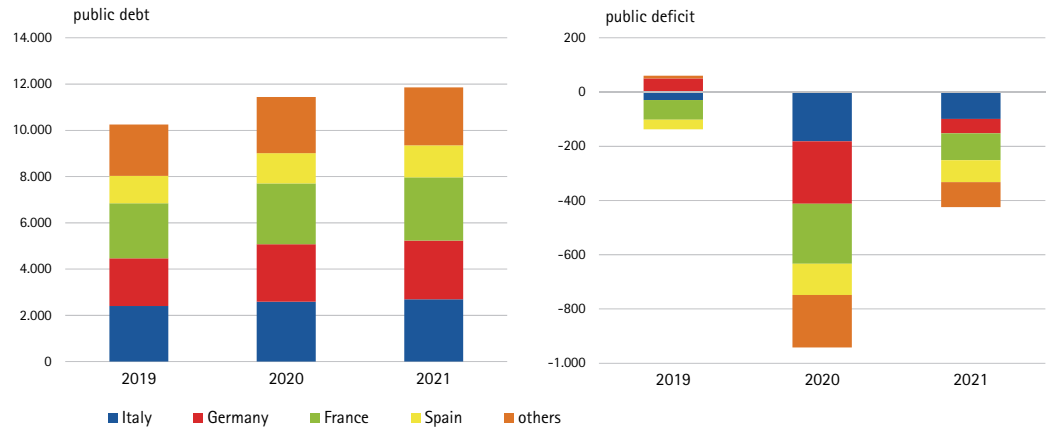
Source: IMF (2020c).

1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

... in the euro area.

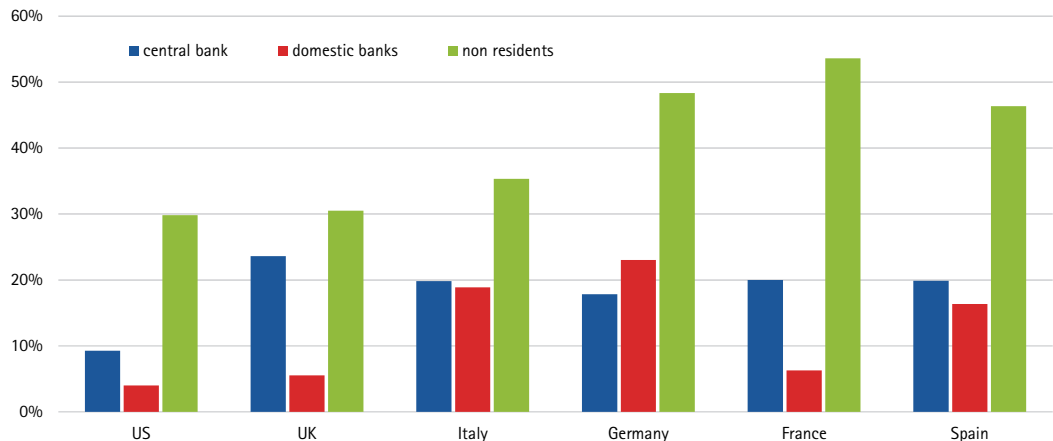
Fig. 27 – Expected increase in public debt and deficit in the euro area
(amounts in billions of euro)



Source: European Commission (2020a).

These circumstances raise many concerns in terms of potential vulnerabilities that might be heightened by a high share of sovereign bonds held by non-residents ...

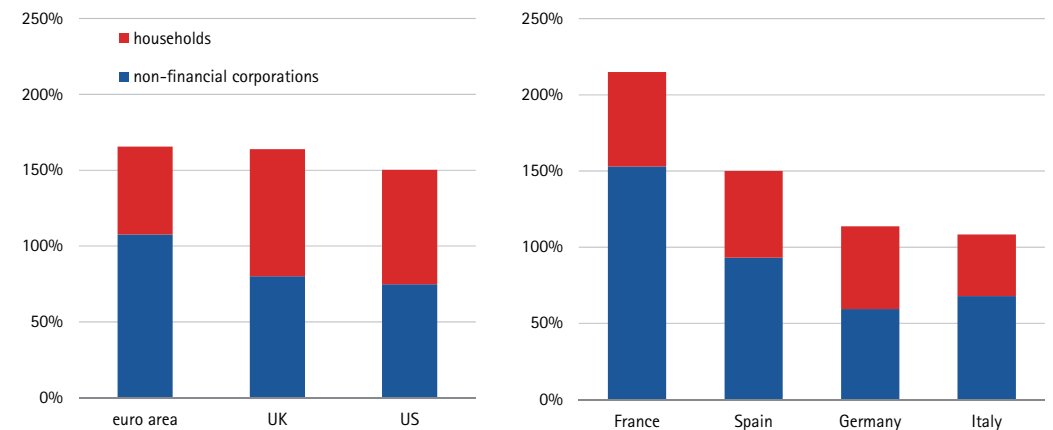
Fig. 28 – Main holders of sovereign bonds in the major advanced countries
(percentage values on total debt at the end of 2019)



Source: Bruegel (2020b).

... and a high level of private debt.

Fig. 29 – Private debt in the main advanced countries in 2019
(as percentage of 2019 GDP)



Source: Bank for the International Settlements.

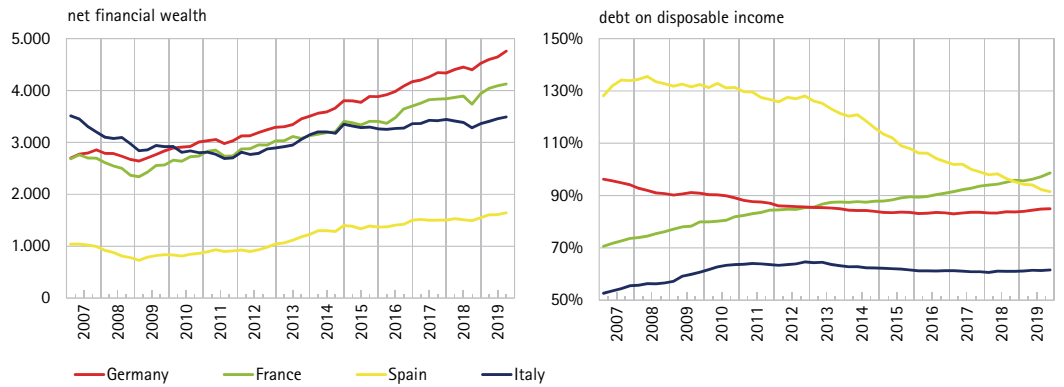
1. Economic impact and policy responses

- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

In this framework, Italy seems to perform better than the main Eurozone countries both in terms of non-residents' holdings of public debt and household debt.

Fig. 30 – Household debt and financial wealth in the euro area
(quarterly data; 1st January 2007 - 31 December 2019; amounts in billions of euro)



Source: ECB, Eurostat.

1. Economic impact and policy responses
- 2. Equity and bond markets trends**
3. Non-financial corporations and banks
4. Households and mutual funds

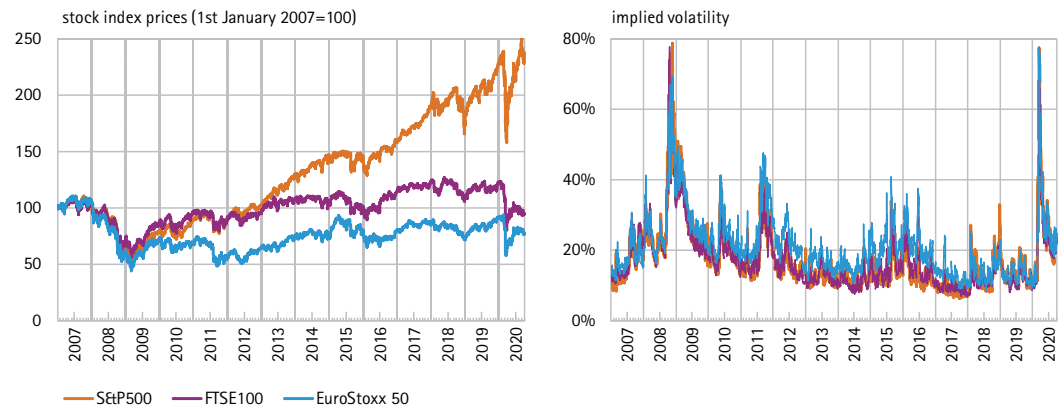
Equity and bond markets trends

Equity markets in the advanced countries were severely affected by the uncertainties triggered by pandemic and the overall increase in risk aversion. In March stock markets indexes plummeted while the implied volatility spiked ...

... followed by a partial recovery in the second term of 2020. Volatility keeps staying on higher levels respect to before the burst of the crisis.

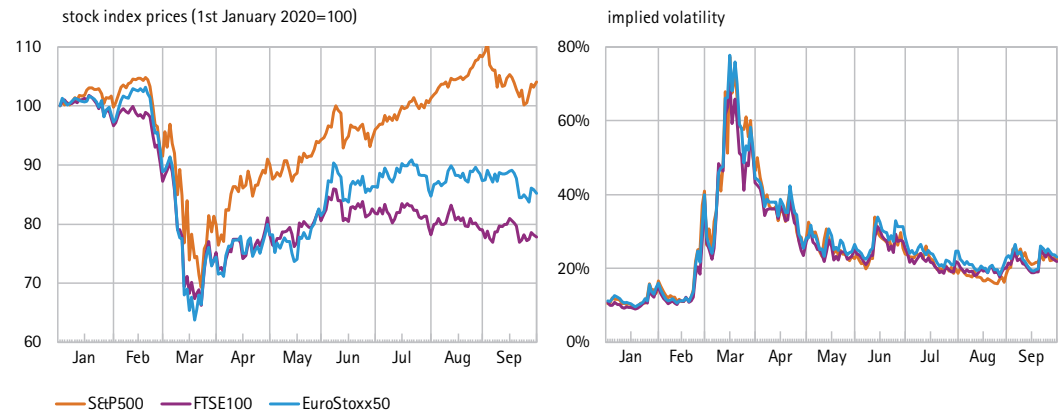
Equity markets in the emerging countries showed similar dynamics...

Fig. 31 – Equity markets trends in the main advanced countries
(daily data; 1st January 2007 - 30 September 2020)



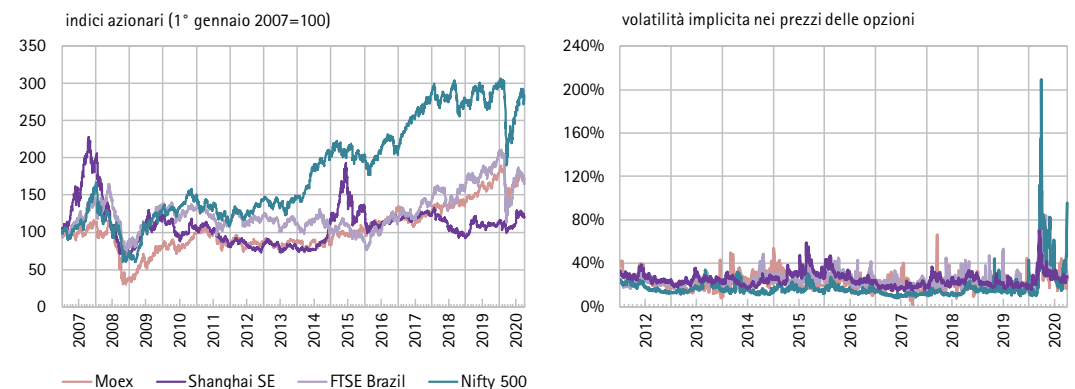
Source: Refinitiv Datastream. The implied volatility is computed as the average of call and put options prices for different moneyness and maturities.

Fig. 32 – Equity markets trends in the main advanced countries in 2020
(daily data; 1st January 2020 - 30 September 2020)



Source: Refinitiv Datastream. The implied volatility is computed as the average of call and put options prices for different moneyness and maturities.

Fig. 33 – Equity markets trends in the main emerging countries
(daily data; 1st January 2007 - 30 September 2020)



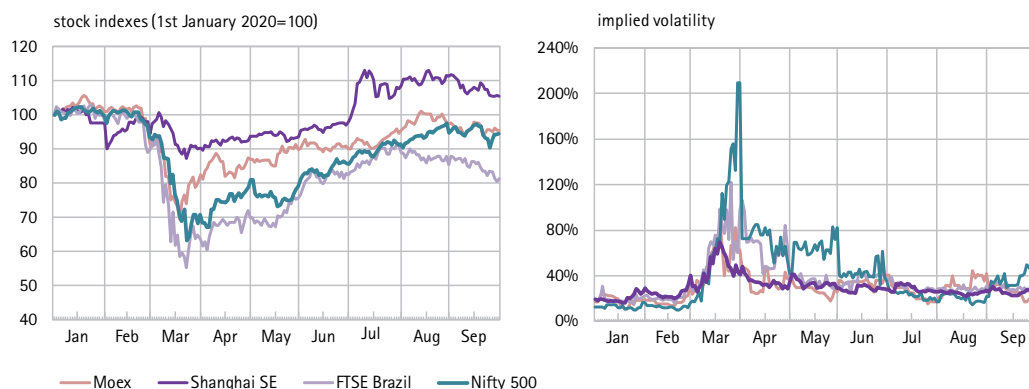
Source: Refinitiv Datastream. In the right graph, the Cboe China index is represented for the Chinese stock exchange, while for the other stock exchanges implied volatilities are based on call and put option prices (average among different moneyness levels). Implied volatility time series are available starting from 1st January 2012.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends**
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

... with the Brazilian market being hit the most.

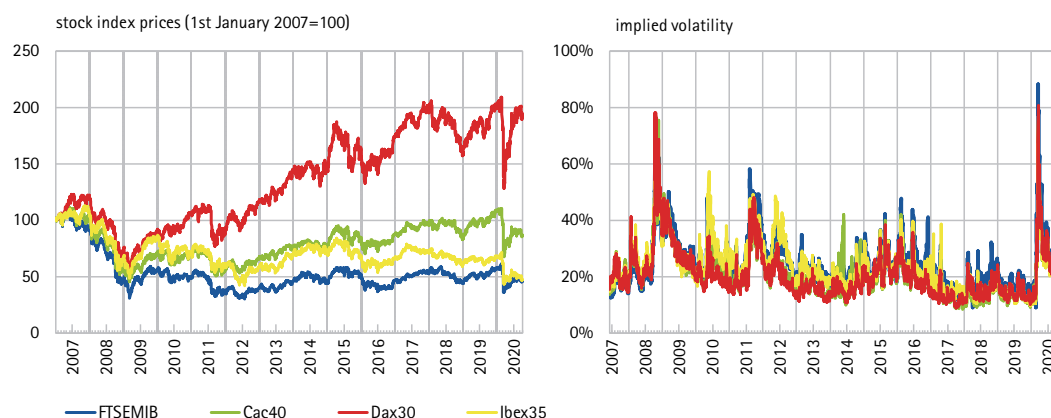
Fig. 34 – Equity markets trends in the main emerging countries in 2020
(daily data; 1st January 2020 – 30 September 2020)



Source: Refinitiv Datastream. In the right graph, the Cboe China index is represented for the Chinese stock exchange, while for the other markets implied volatilities are based on call and put option prices (average among different *moneyness* levels) whose underlying is the correspondent stock index. Implied volatility time series are available starting from 1st January 2012.

In some euro area markets volatility peaked to levels higher than those recorded during the global financial crisis.

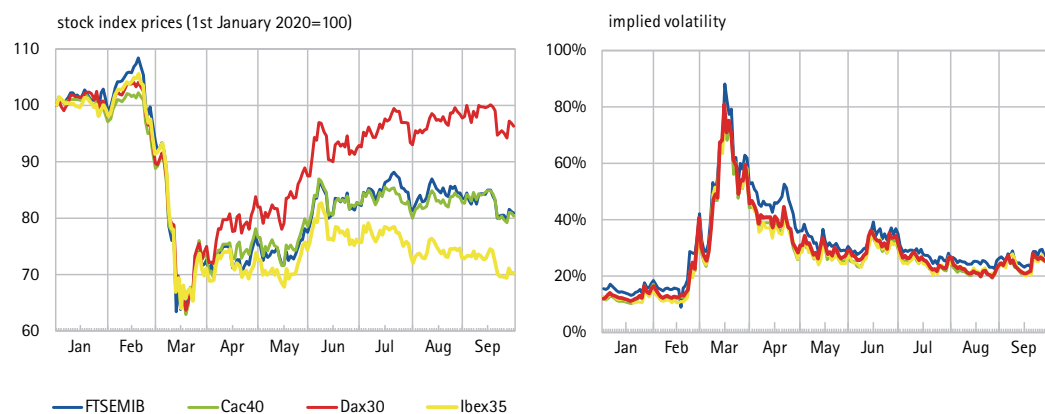
Fig. 35 – Equity markets trends in the main euro area countries
(daily data; 1st January 2007 – 30 September 2020)



Source: Refinitiv Datastream.

As of 30 September, none of the main euro area markets has recovered the sharp decline incurred in March; volatility keeps staying high.

Fig. 36 – Equity markets trends in the main euro area countries in 2020
(daily data; 1st January 2020 – 30 September 2020)



Source: Refinitiv Datastream.

1. Economic impact and policy responses

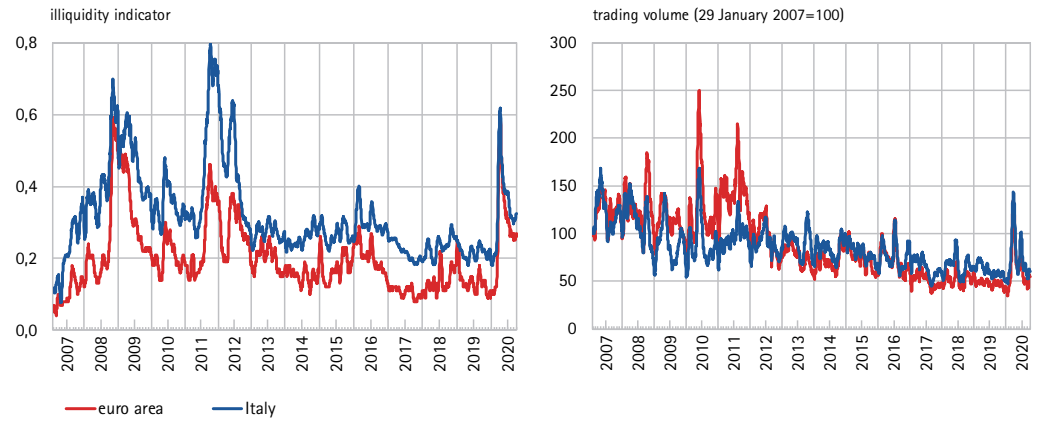
2. Equity and bond markets trends

3. Non-financial corporations and banks

4. Households and mutual funds

Illiquidity and turnover increased significantly during the first quarter of 2020. Afterwards, both indicators have showed a decreasing trend.

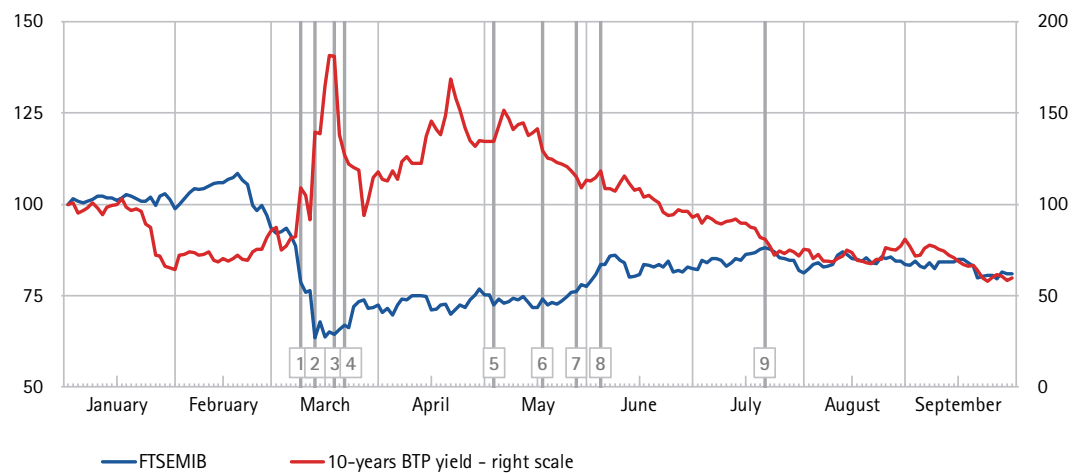
Fig. 37 – Illiquidity indicators and turnover
(daily data; 29 January 2007 – 30 September 2020; 20-days moving average)



Source: our computations on Refinitiv Datastream data. In the left graph the illiquidity index is represented; an increase (decrease) of the indicator signals a worsening (improvement) of 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 between absolute value of the return and exchange volume; 4) implied volatility. The illiquidity indicator is normalized between 0 and 1. All the computations refer to EuroStoxx50 (euro area) and FTSEMIB (Italy).

Italian financial markets were severely hit by the crisis, although a partial recovery was recorded due to fiscal and monetary measures announced or adopted to cope with the crisis.

Fig. 38 – Trends in the Italian financial markets and main events in 2020
(daily data; 1st January 2020 – 30 September 2020; 1st January 2020=100)



Source: Refinitiv. Numbers from 1 to 9 refer to the following events: 1. start of the lockdown in Italy (March 9); 2. statement by the ECB President about the spreads of government bonds in the euro area (March 12); 3. short selling ban on the Italian equity market (March 18); 4. ECB announcement about the launch of the PEPP (March 18); 5. start of the so-called 'phase 2' in Italy (May 4); 6. removal of the short selling ban on the Italian market (May 18); 7. European Commission proposal of a recovery fund called Next Generation EU (May 27); 8. removal of restrictions to mobility across regions in Italy (June 3); 9. European Council endorses Next Generation EU (July 21).

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

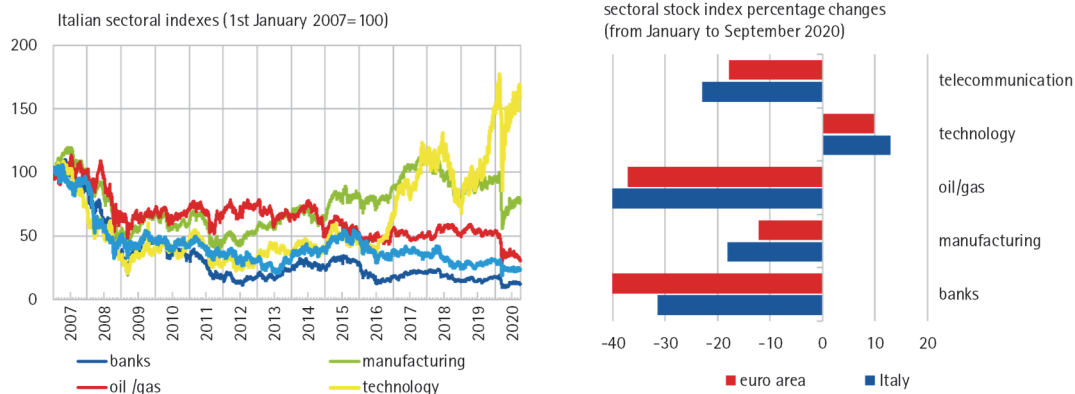
July 2020

Trends in sectoral indexes were heterogeneous depending on differences in the impact of the lockdown.

In euro area non-financial sector, multipliers signaled a significant drop of market prices relative to earnings per share and book value, that is an increasing risk of undervaluation from the end of February to around middle March. The trend reversed in the second quarter above all referring to price on earnings ratio, putting on evidence that a misalignment between prices and fundamental values persists.

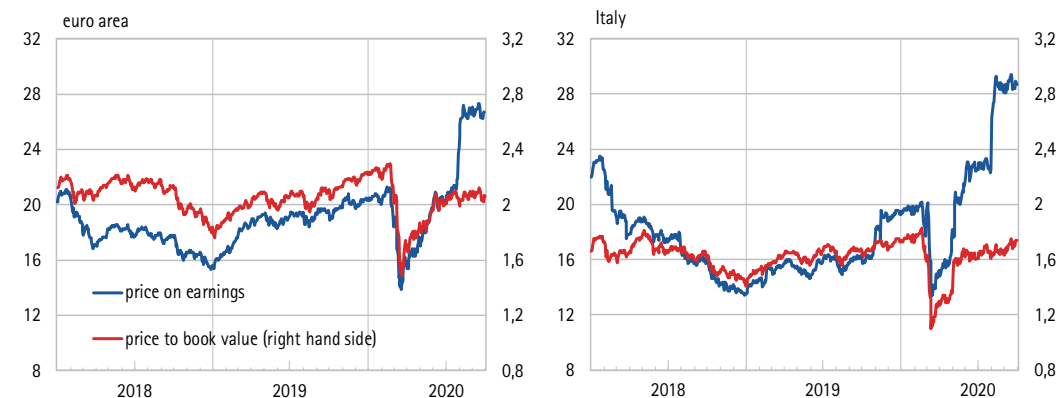
A significant drop of multipliers was registered in the banking sector as well. Starting from April, the recovery was less sharp in the banking sector respect to the non-financial one.

Fig. 39 – Sectoral equity markets trends
(daily data; 1st January 2007 – 30 September 2020)



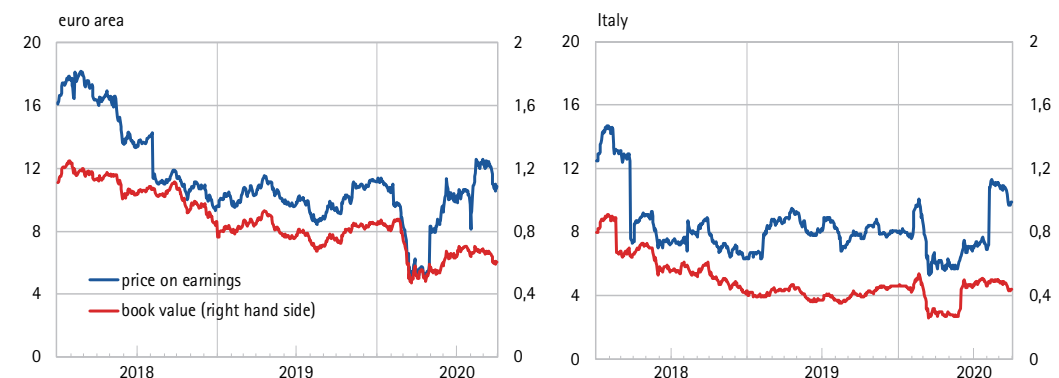
Source: our computations on Refinitiv Datastream data. Sectoral index FTSE Italy All Shares and EuroStoxx are represented.

Fig. 40 – Price to book value and price on earnings of the listed non-financial firms
(daily data; 1st January 2018 – 30 September 2020)



Source: Refinitiv Datastream. Indicators are based on EuroStoxx non-financial Index data (euro area) and Datastream non-financial Index data (Italy).

Fig. 41 – Price to book value and price on earnings of the listed banks
(daily data; 1st January 2018 – 30 September 2020)

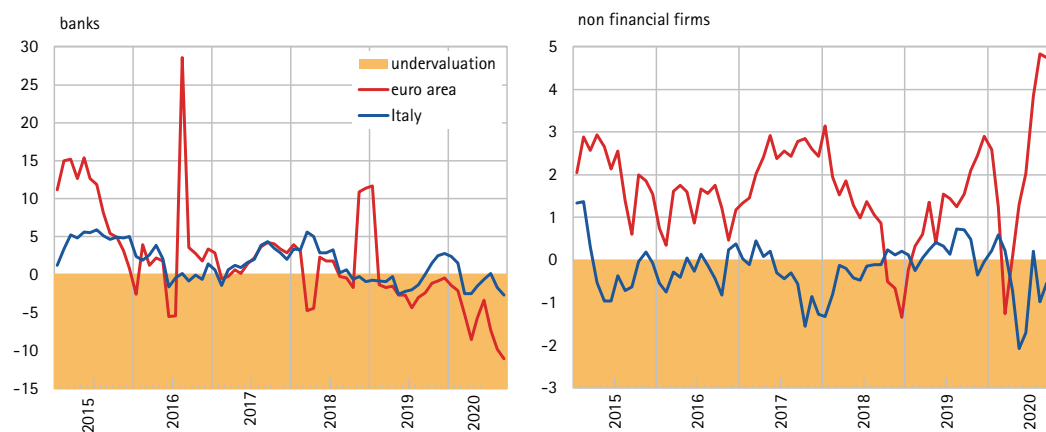


Source: Refinitiv Datastream. Figures refers to EuroStoxx Banks Index data (euro area) and to Datastream Banks Index (Italy).

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends**
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

Indicators of market performance relative to fundamental values, based on econometric models, showed a rising probability of undervaluation above all in the banking sector. Only in the euro area non-financial sector the trend reversed.

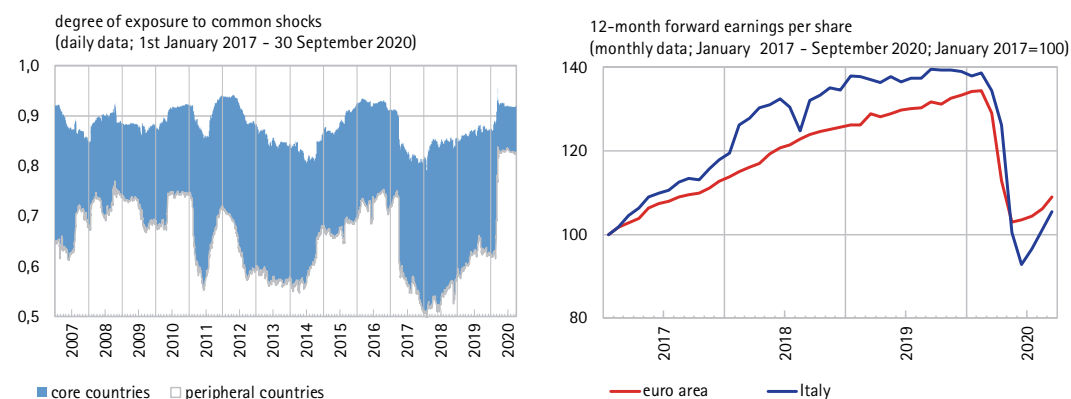
Fig. 42 – Index of listed companies stock price misalignment respect to fundamental values (daily data; percentage values; 1st January 2007 – 30 September 2020)



Source: our computations on Refinitiv Datastream data. The *over/undervaluation* index is the percentage difference between stock price and fundamental value, estimated 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.

During the crisis the degree of exposure of core countries respect to common shocks has significantly increased, signaling a raise of contagion risk. Expectations regarding earnings per share were deeply worsened in the first semester 2020. From June to September the trend has partially reversed.

Fig. 43 – Stock market sensitivity to common shocks and expected earnings per share in the euro area



Source: our computations on Refinitiv Datastream data. In the left graph we measure the degree of exposure to common shocks as the average R^2 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 θ_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^2 respectively in the group of core countries (Dax30, Cac40, Aex Index, Bel20 Index) and in the group of the so-called peripheral countries (FTSEMIB, 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.

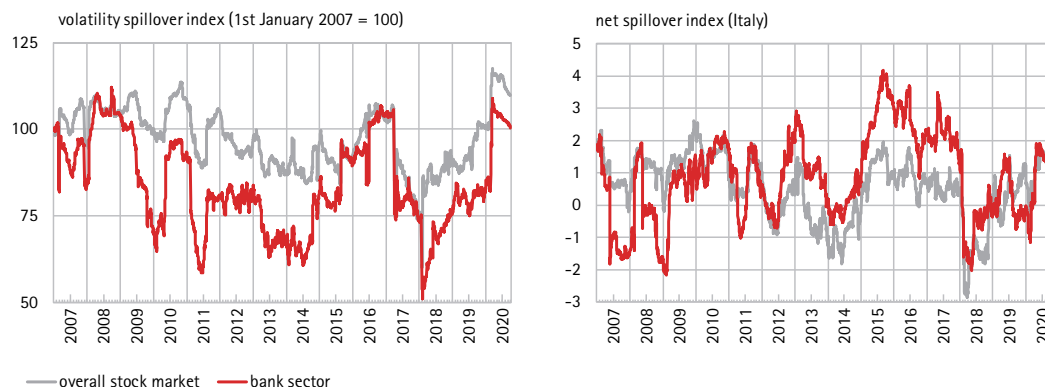
- 1. Economic impact and policy responses
- 2. Equity and bond markets trends**
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

July 2020

In the euro area contagion risk related to volatility shocks has increased above all in the banking sector. On the basis of net volatility spillover index, Italy shows to be one of the leading markets in the transmission of shocks.

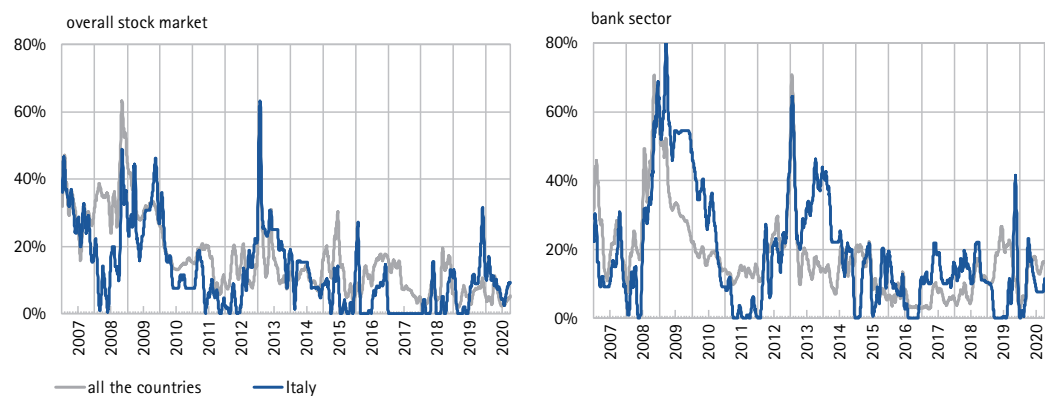
Analysis of interconnections among stock market returns confirms the increase of contagion risk above all in the banking sector in the first quarter 2020. The indicator has started to decrease since April.

Fig. 44 – Volatility spillover index for the stock markets in the euro area
(percentage values; daily data; 1st January 2007 – 30 September 2020)



Source: our computations on Refinitiv Datastream data. Stock indexes included in the analysis reported in the left graph are S&P500, FTSE100, FTSEMIB, Dax30, Cac40, Ibex35, Aex Index, Bel20 Index, Iseq 20 Index, Portugal PSI20 index, FTSE Athex Index, Shanghai SE, Moex e Swiss Market Index. Stock indexes included in the analysis reported in the right graph are 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 Index banks. In the right graph 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. 45 –Degree of interconnection among stock markets in the euro area
(2-months moving average; daily data; 1st January 2007 – 30 September 2020)



Fonte: our elaborations on Refinitiv Datastream data. The represented contagion indicator measures the degree of interconnectedness among stock markets estimated by applying VECM models on return time series. Stock indexes included in the analysis are: 1) in the left graph, S&P500, FTSE100, FTSEMIB, Dax30, Cac40, Ibex35, Aex Index, Bel20 Index, Iseq 20 Index, Portugal PSI20 index, FTSE Athex Index, Shanghai SE, Moex e Swiss Market Index; 2) 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, S&P500 banks, Portugal Datastream index banks, China Datastream Index banks, Russia Datastream Index banks in the right graph. For methodological details see CONSOB Working paper no. 72, 2012.

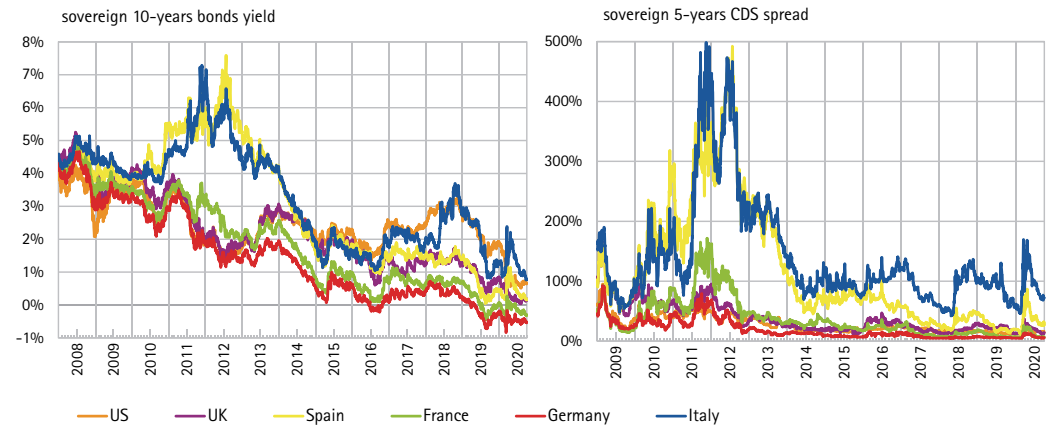
- 1. Economic impact and policy responses
- 2. Equity and bond markets trends**
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

Sovereign bonds markets were hardly affected by the crisis mainly because of expectations of a fast deterioration of public finances.

However, after the peak in yields recorded in March, public debt markets rebounded thanks to exceptional monetary measures adopted by the central banks.

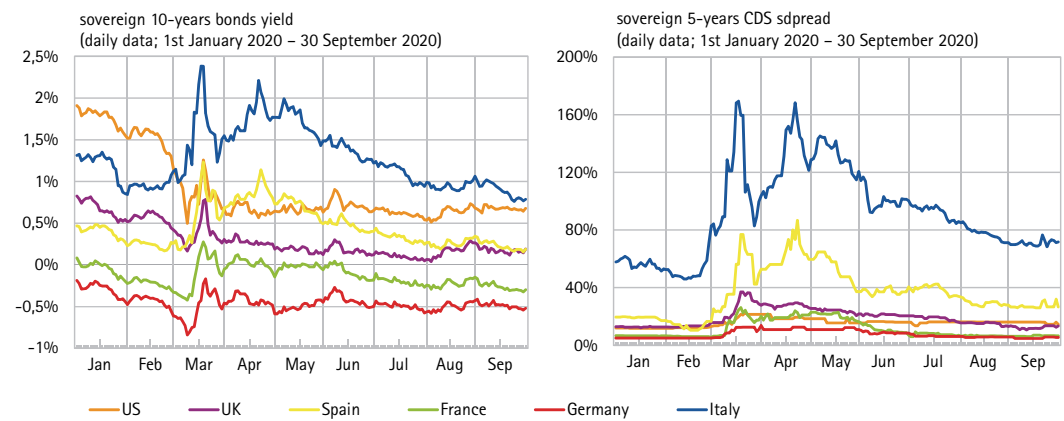
Primary markets might experience significant pressures because of the expected huge amount of sovereign bonds that will be issued in the coming months in order to face the health and the economic crisis and to satisfy the future refinancing needs.

Fig. 46 – Sovereign bonds yields and CDS spreads in the main advanced countries
(daily data; 1st January 2008 – 30 September 2020)



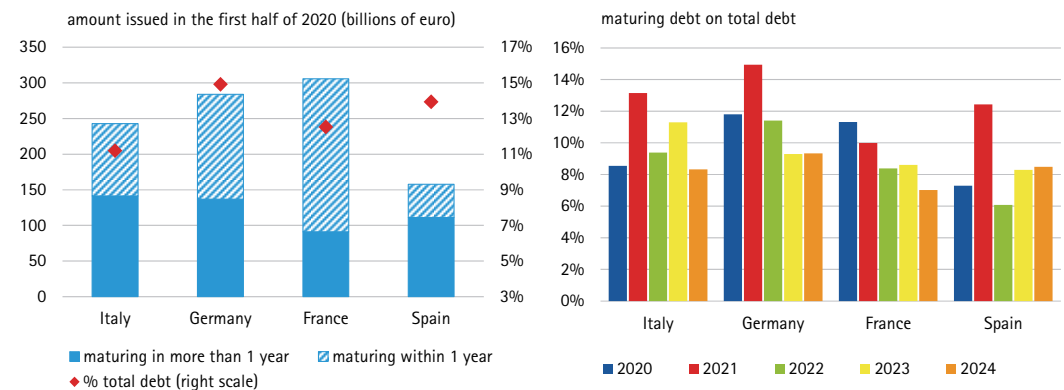
Source: Refinitiv Datastream.

Fig. 47 – Sovereign bonds yields and CDS spreads in the main advanced countries in 2020



Source: Refinitiv Datastream.

Fig. 48 – Sovereign bonds issues and public debt maturity structure in the main euro area countries



Source: calculations on Eikon data. The amount issued in 2020 refers to bonds issued in 2020 and still outstanding as of 30 June 2020.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends**
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

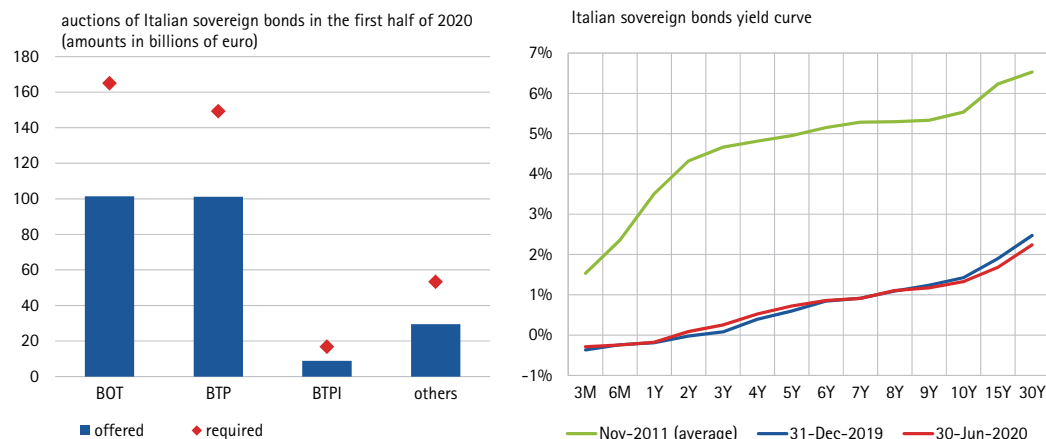
July 2020

As for Italy, in the first half of 2020 primary sovereign bonds market did not show signs of significant pressure, as confirmed by both the results of the auctions and the level and slope of the yield curve.

In the main advanced countries the crisis has also impacted the secondary markets for private bonds.

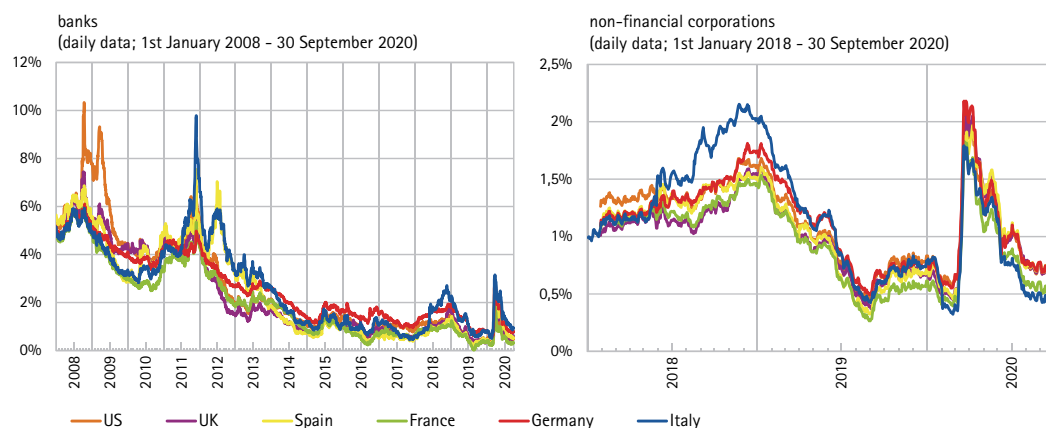
In the second quarter of the year there was a gradual decrease of private bonds yields. However, at the end of June, yields remained to levels higher than the ones recorded before the outbreak of pandemic.

Fig. 49 –Italian sovereign bonds auctions in the first half of 2020 and sovereign bond yield curve



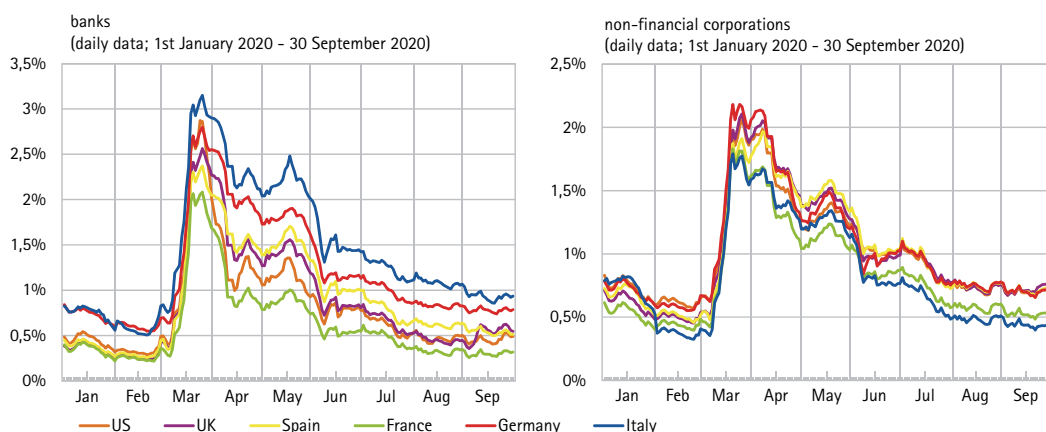
Source: calculation on Bank of Italy and Refinitiv Datastream data.

Fig. 50 – Markit Iboxx indexes in the main advanced countries



Source: Refinitiv Datastream.

Fig. 51 – Markit Iboxx Indexes in the main advanced countries in 2020



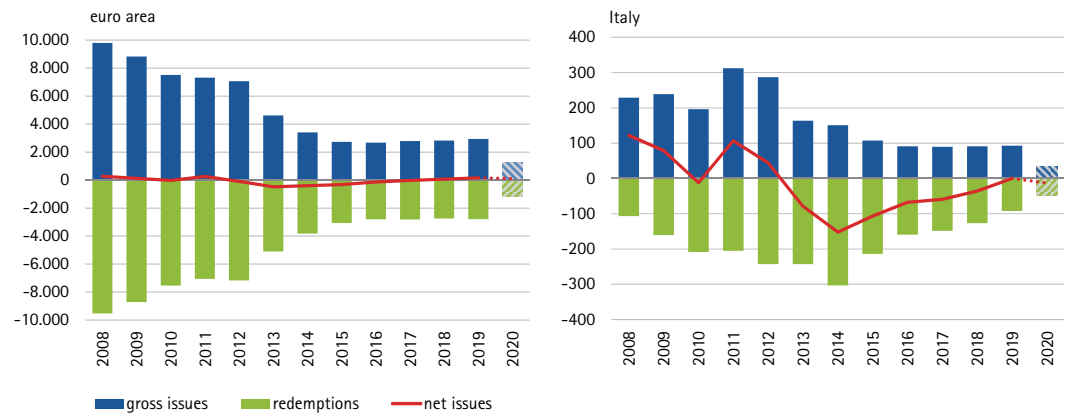
Source: Refinitiv Datastream.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends**
- 3. Non-financial corporations and banks
- 4. Households and mutual funds

In Italy the crisis affected also the primary markets of private bonds with negative net issues recorded both in the banking sector ...

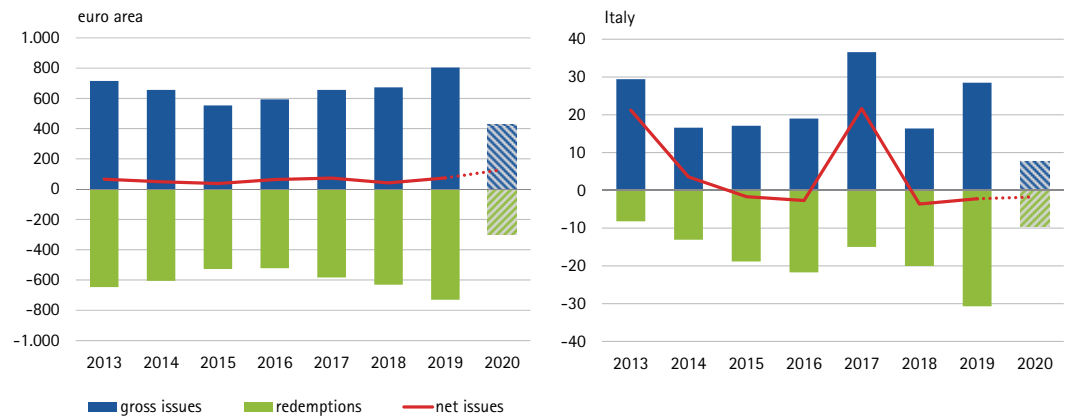
... and in non-financial sector.

Fig. 52 - Bank bonds issues in the euro area and in Italy
(yearly data; 2020 figures refer to the first five months)



Source: ECB.

Fig. 53 - Non-financial corporate bonds issues in the euro area and in Italy
(yearly data; 2020 figures refer to the first five months)



Source: ECB.

July 2020

1. Economic impact and policy responses
2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
4. Households and mutual funds

Non-financial corporations and banks

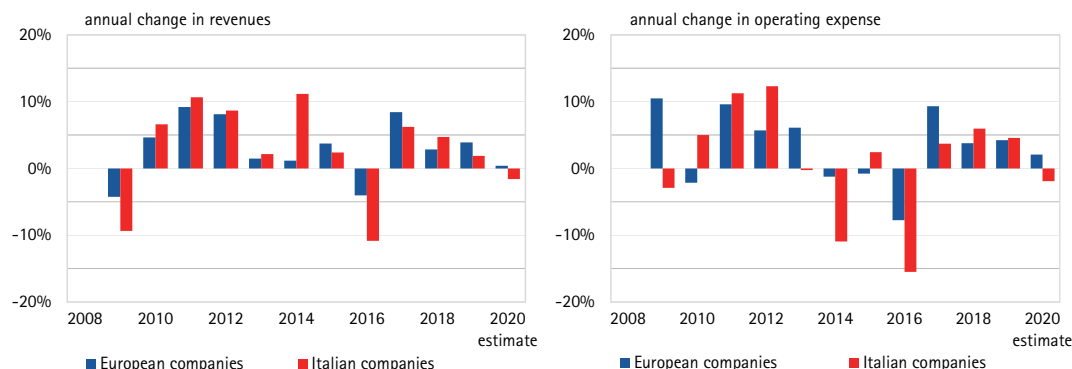
Revenues of European non-financial listed companies are expected to stall (or to contract for Italian companies) as a consequence of the pandemic in 2020. Operating costs should remain subdued...

... while profitability of Italian non-financial listed companies is forecast to be hit more severely than their European peers.

Leverage is expected to decline slightly also for Italian firms, although it remains historically higher than European peers. Net debt in 2020 is expected to remain in line with 2019 in Europe, following a significant rise in recent years, possibly also due to the very low interest rate environment in the EU.

Fig. 54 – Revenues and operating expenses of the main listed non-financial companies in the euro area and in Italy

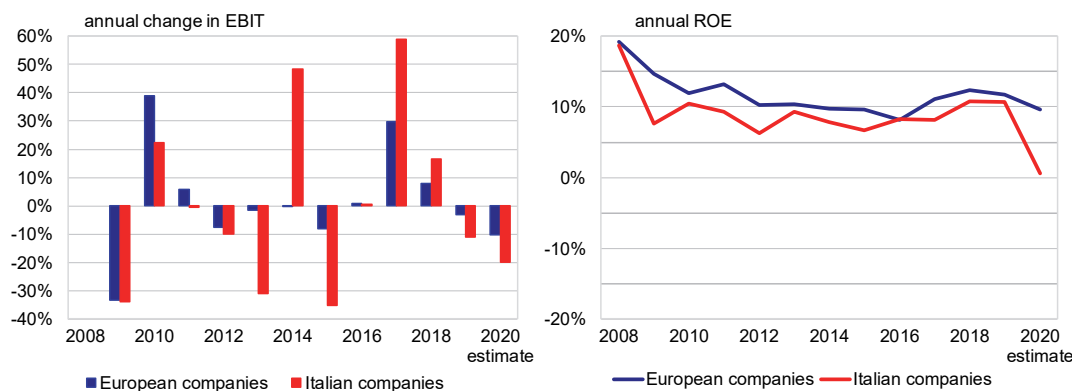
(yearly data; year-on-year percentage change)



Source: Calculations on Bloomberg data; 2020 figures are estimated. Graphs show the sample data average.

Fig. 55 – Profitability of the main listed non-financial companies in the euro area and in Italy

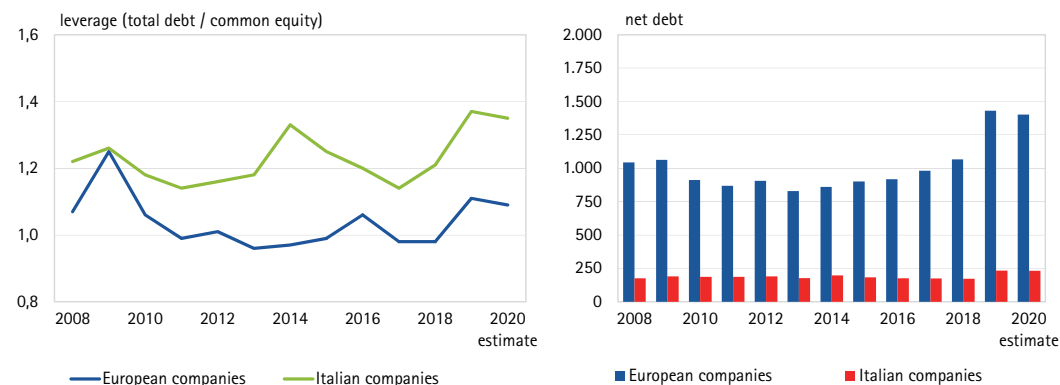
(yearly data)



Source: calculations on Bloomberg data. Graphs show the sample data average.

Fig. 56 – Leverage of the main listed non-financial companies in the euro area and in Italy

(yearly data; amounts in billions of euro)



Source: calculations on Bloomberg data. 2020 figures are estimated.

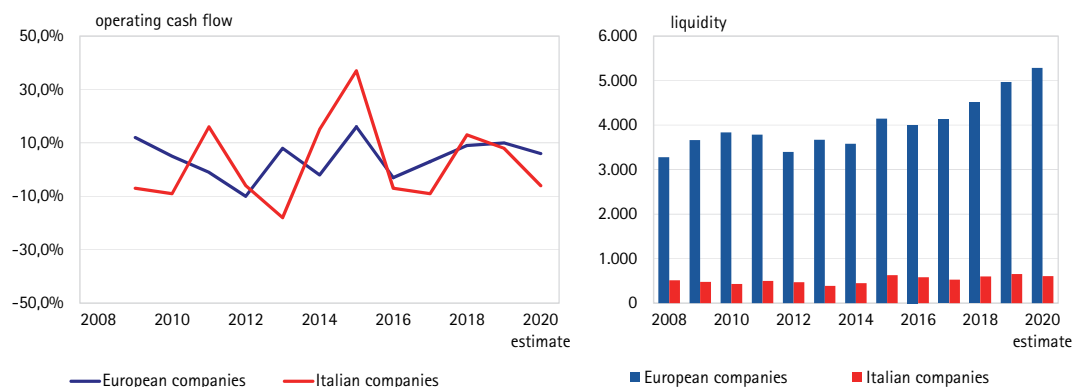
1. Economic impact and policy responses
2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
4. Households and mutual funds

The liquidity of European companies has risen significantly in recent years, while it has been more stable for Italian companies, whose operating cash flows are also expected to decline in 2020.

Looking at a simple vulnerability profile, which is rather similar for European and Italian firms, declining profitability and growing leverage with respect to 10-year averages are the main vulnerabilities faced by European non-financial listed companies...

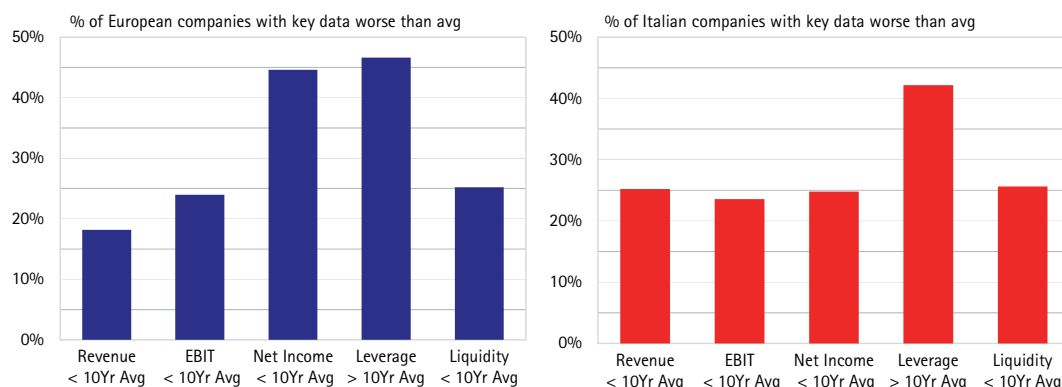
... however, considering the (year on year) change in joint vulnerability indicators, the profile of Italian firms appears to be deteriorating and, overall, weaker than those of European firms.

Fig. 57 – Cash flow and liquidity of the main listed non-financial companies in the euro area and in Italy (yearly data; year-on-year percentage changes; amounts in billions of euro)



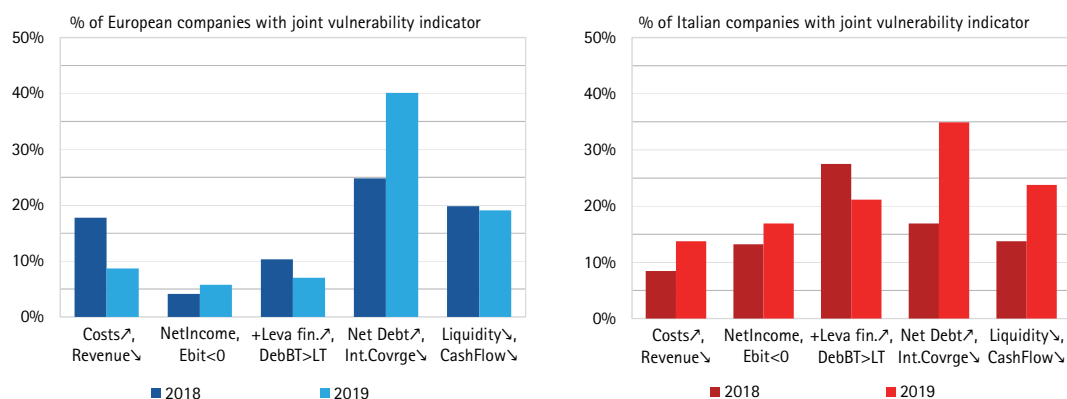
Source: calculations on Bloomberg data. 2020 figures are estimated.

Fig. 58 – Vulnerability of the main listed non-financial companies in the eurozone and Italy at the end of 2019 (share of companies in the sample showing indicators worse than their 10-year average)



Source: calculations on Bloomberg data.

Fig. 59 – Joint vulnerabilities of the main listed non-financial companies in the euro area and in Italy (dati di fine periodo)



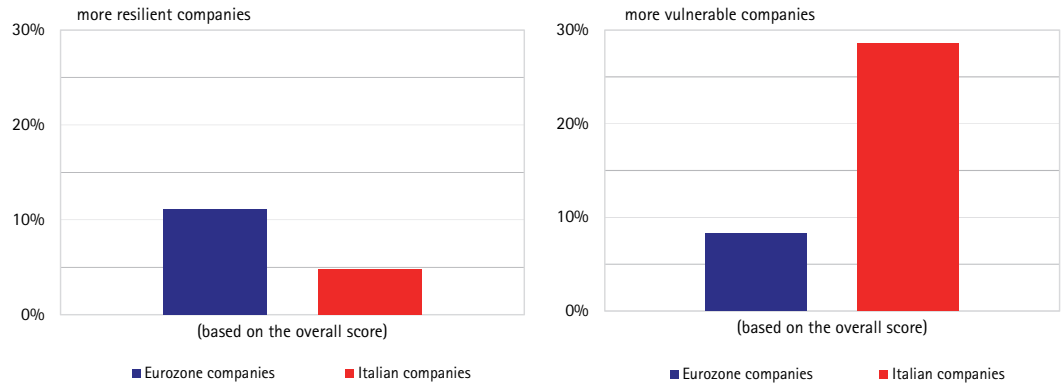
Source: calculations on Bloomberg data.

1. Economic impact and policy responses
2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
4. Households and mutual funds

July 2020

Using a score-based indicator to summarize, the European sample has a proportion of most resilient companies (11%) which is twice as much that of the Italian sample (5%); the opposite holds true for the most vulnerable companies (8% vs. 29%).

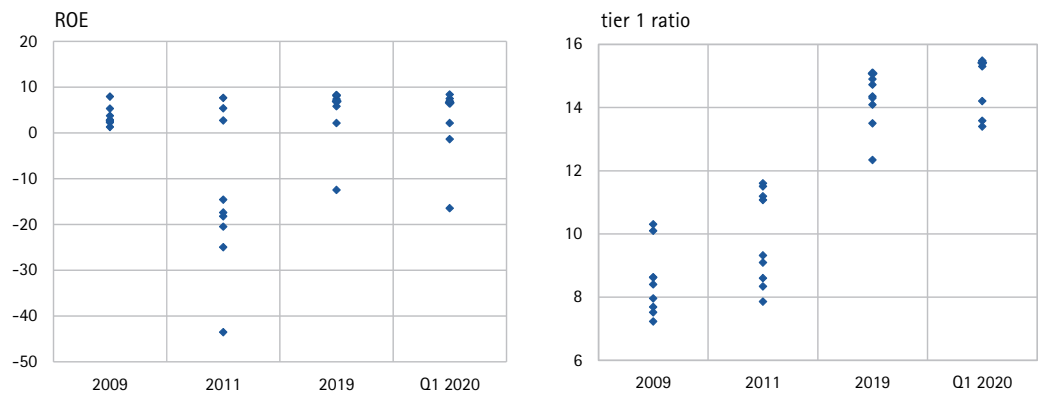
Fig. 60 – Indicator of the overall vulnerability of the main listed non-financial companies in the euro area and in Italy



Source: calculations on Bloomberg data. Companies are ranked according to a score calculated on the basis of three factors: profitability, leverage and liquidity. The highest score (≥ 7) is assigned to a company that matches all the parameters of robustness, while a score ≤ 2 signals a company with various vulnerabilities.

As for the Italian banks, in 2019 profitability continued to be subdued while capital adequacy improved significantly with respect to 2009 and 2011.

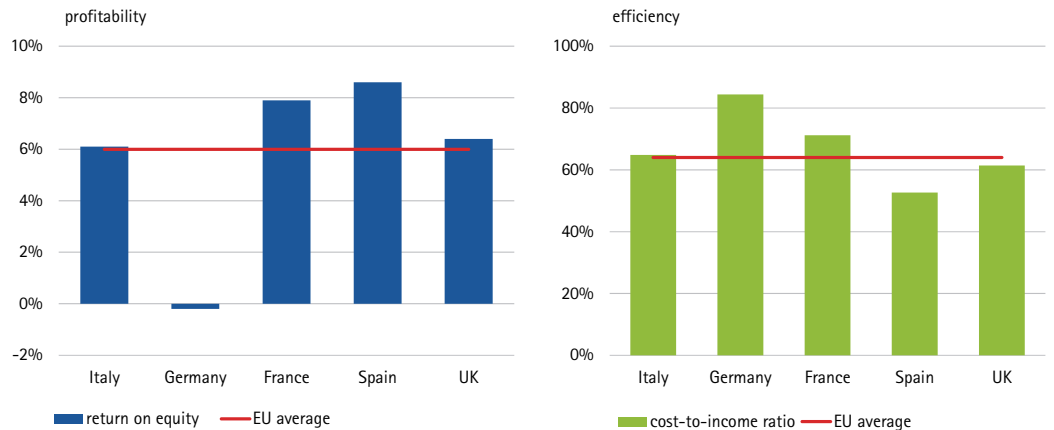
Fig. 61 – Profitability and capital adequacy of the major Italian banking groups



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

Profitability and efficiency of the Italian banks were in line with the European average...

Fig. 62 – Profitability and efficiency of the major banks in the main European countries in 2019

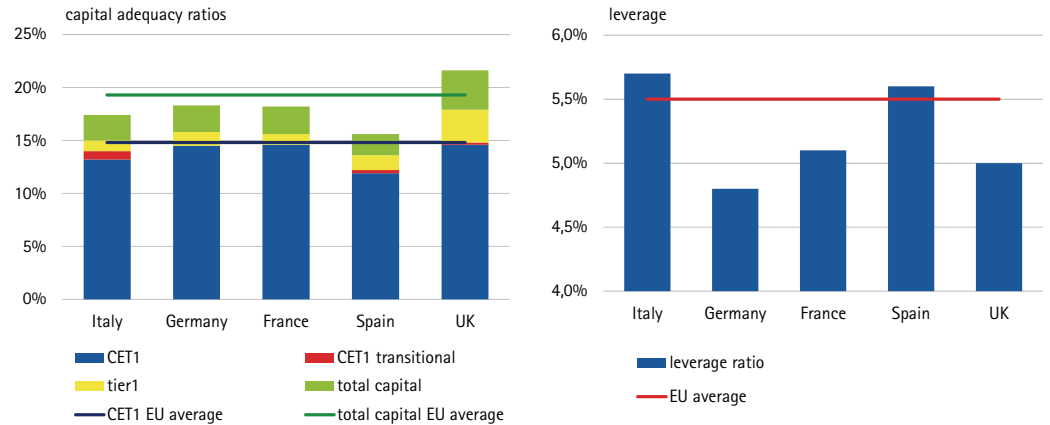


Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
- 4. Households and mutual funds

... while capital adequacy continued to be below the average.

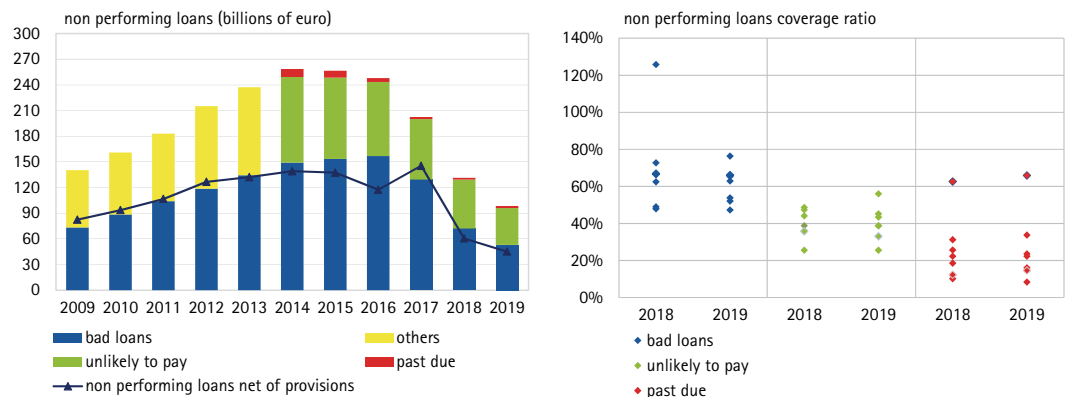
Fig. 63 – Capital adequacy and leverage of the major banks in the main European countries in 2019



Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

In the last 10 years credit quality of the Italian banks has significantly improved ...

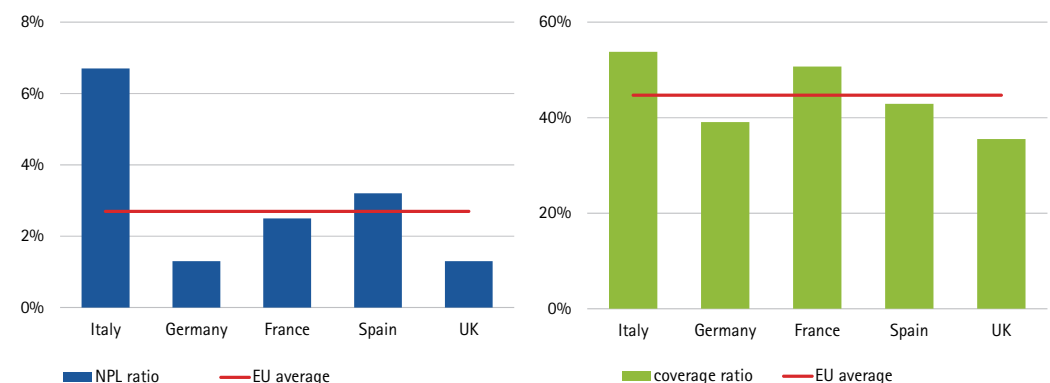
Fig. 64 – Credit quality of major Italian banking groups



Source: calculations on data from consolidated annual and interim reports of the 8 largest groups. Starting from the first quarter of 2015 the classification of loans into risk classes was updated in order to reflect the changes provided in 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. The total volume of loans classified in the previous categories that made up the perimeter of impaired loans as at 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).

... while both the share of NPLs on total gross loans ...

Fig. 65 – Credit quality of the major banks in the main European countries in 2019



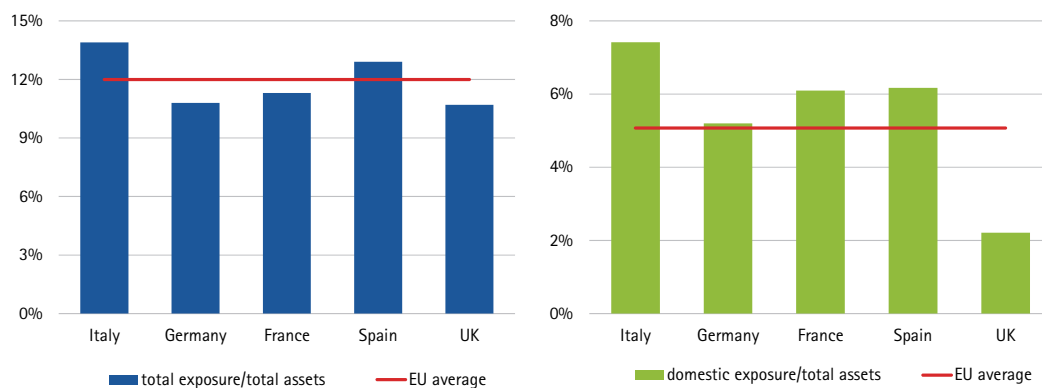
Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

1. Economic impact and policy responses
2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
4. Households and mutual funds

July 2020

... and the share of sovereign bonds holdings on total assets have remained higher with respect to their European peers.

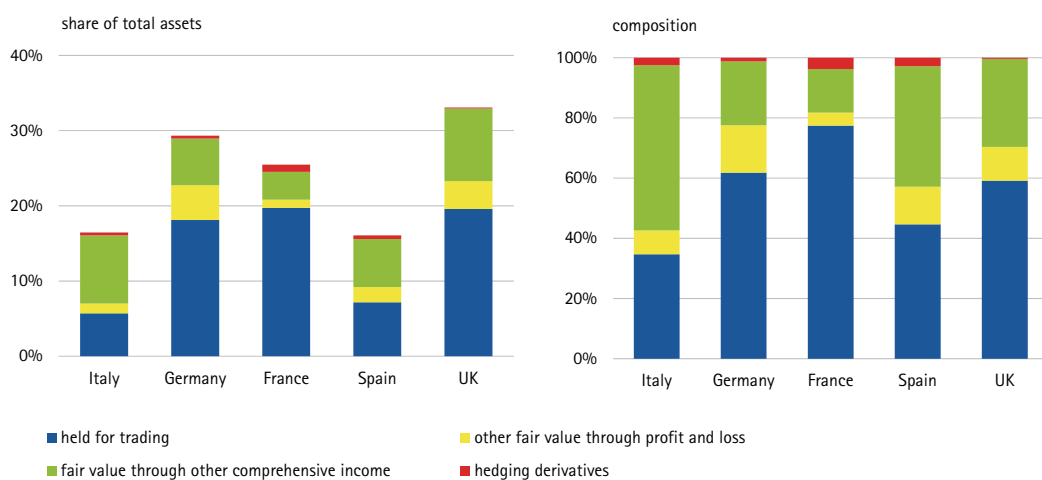
Fig. 66 – Sovereign bonds holdings of the major banks in the main European countries in 2019



Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

Italian banks kept being characterized by a lower percentage of financial assets at fair value on total assets ...

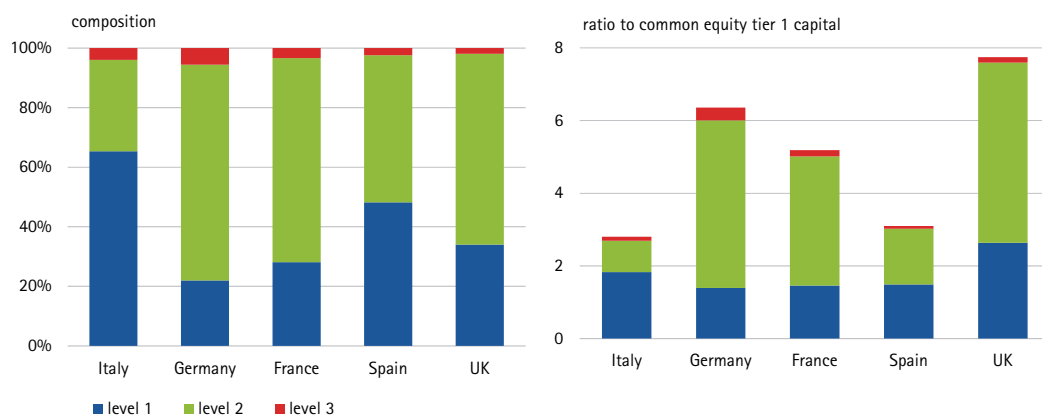
Fig. 67 – Financial assets at fair value of the major banks in the main European countries in 2019



Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

... and by a lower share of illiquid assets on tier 1 capital.

Fig. 68 – Fair value hierarchy of the financial assets of the major banks in the main European countries in 2019

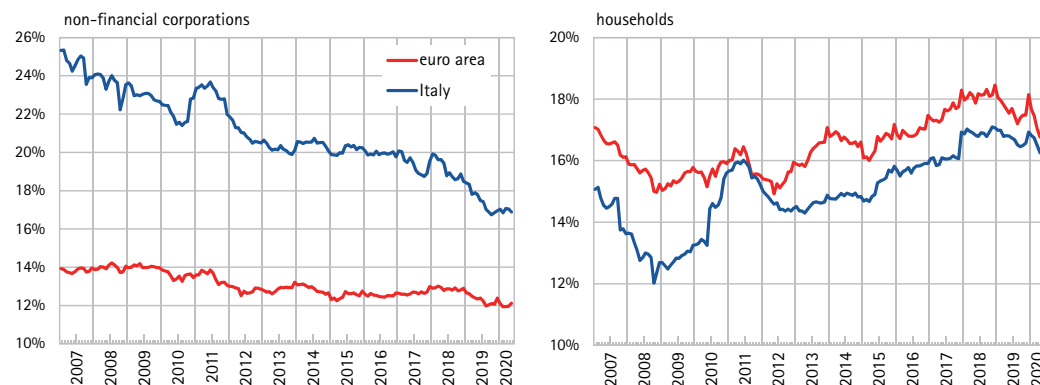


Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
- 4. Households and mutual funds

Despite the continuous decrease in Italian banking loans to firms, at the end of 2019, the share of loans to non-financial corporations to total assets remains significantly above the European average. Such gap seems to be less pronounced with regard to loans to households.

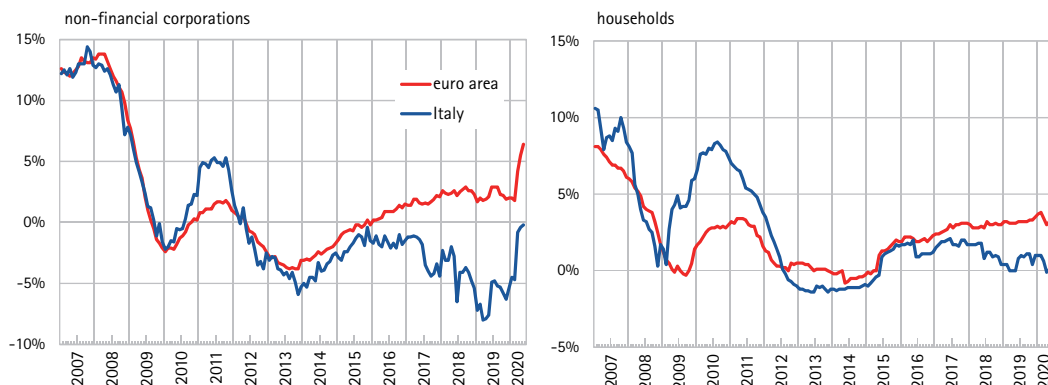
Fig. 69 – Loans to non-financial corporations and households as percentage of total assets
(monthly data; January 2007 – May 2020)



Source: calculations on ECB data.

In first half of the year, the measures adopted to support the access of firms to bank credit have brought to a sudden increase in the growth rate of loans to non-financial corporations in Italy, thus interrupting the negative trend recorded since 2012.

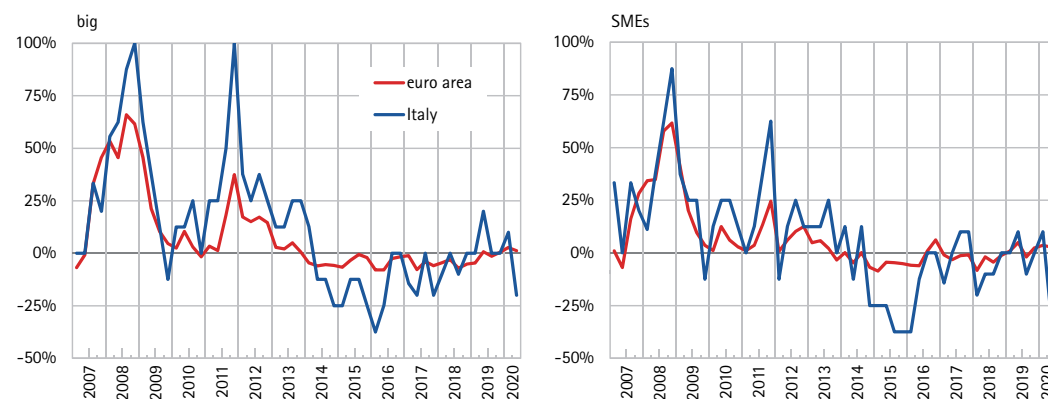
Fig. 70 – Annual growth rate of loans to non-financial corporations and households
(monthly data; January 2007 – May 2020)



Source: calculations on ECB data.

Such trend is confirmed also by the easing in credit standards indicators for banking loans to non-financial corporations.

Fig. 71 – Credit standards of supply of bank loans to non-financial corporations in the euro area and in Italy
(quarterly data; 1st January 2007 – 30 June 2020)



Source: ECB Bank lending survey. The credit standard indicator is the net percentage of banks reporting a tightening in credit standards. For the euro area the indicator is computed as weighted average.

1. Economic impact and policy responses
2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
4. Households and mutual funds

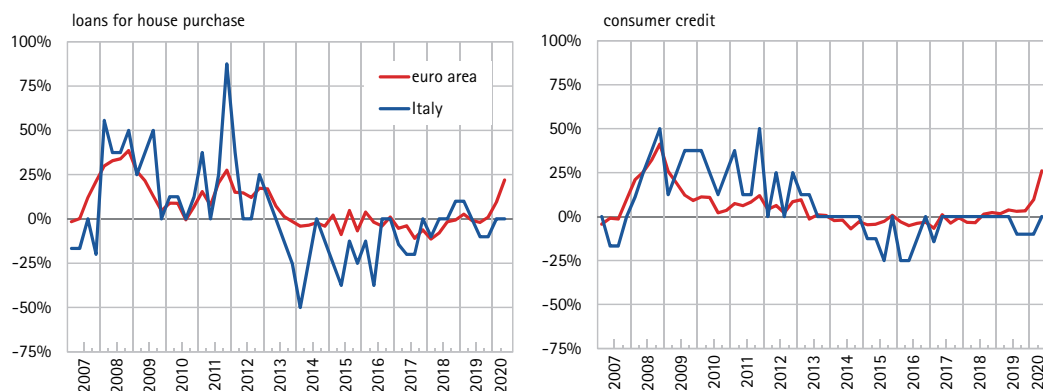
July 2020

On the contrary, credit standard indicators of supply of bank loans to households tightened. Such dynamics are also linked to movements in demand for bank loans ...

... showing a strong increase from non-financial corporations and ...

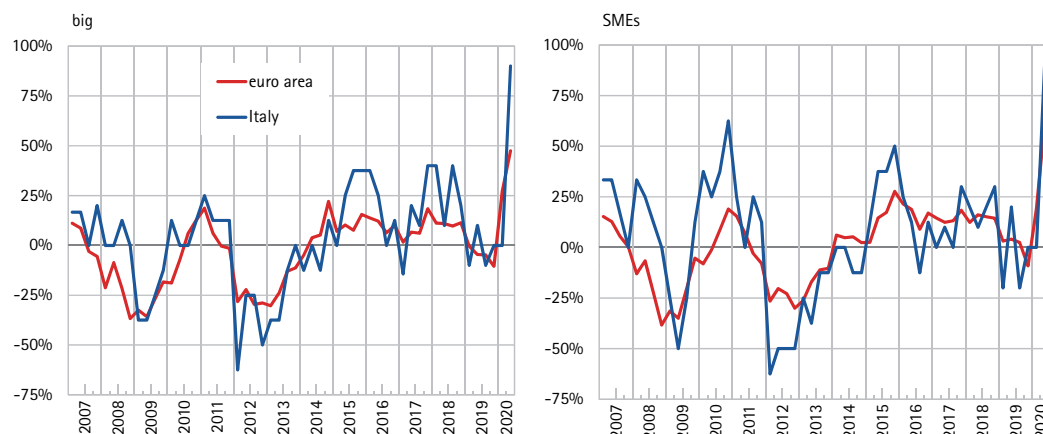
... a sharp decline from households.

Fig. 72 – Credit standards of supply of bank loans to households in the euro area and in Italy
(quarterly data; 1st January 2007 – 30 June 2020)



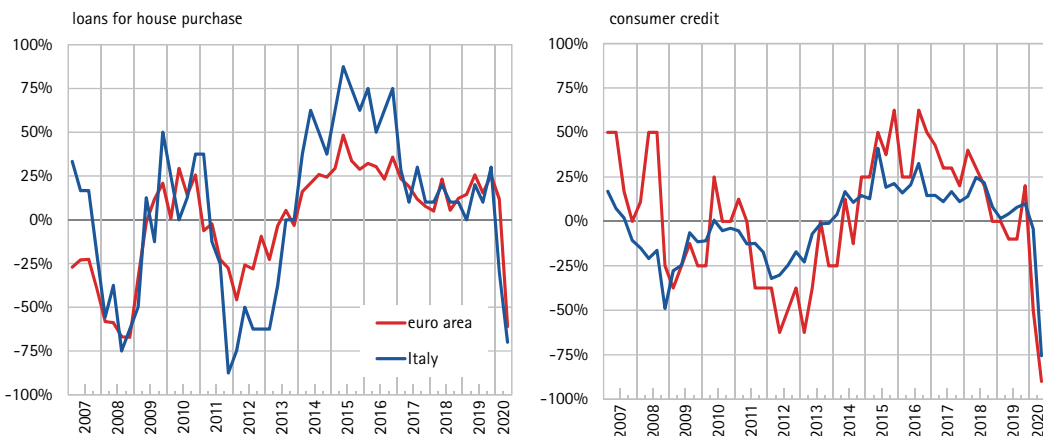
Source: ECB Bank lending survey. The credit standard indicator is the net percentage of banks reporting a tightening in credit standards. For the euro area the indicator is computed as weighted average.

Fig. 73 – Demand for bank loans from non-financial corporations in the euro area and in Italy
(quarterly data; 1st January 2007 – 30 June 2020)



Source: ECB Bank lending survey. The demand for bank loans is defined as the net percentage of banks reporting an increase in demand. For the euro area the indicator is computed as weighted average.

Fig. 74 – Demand for bank loans from the households in the euro area and in Italy
(quarterly data; 1st January 2007 – 30 June 2020)

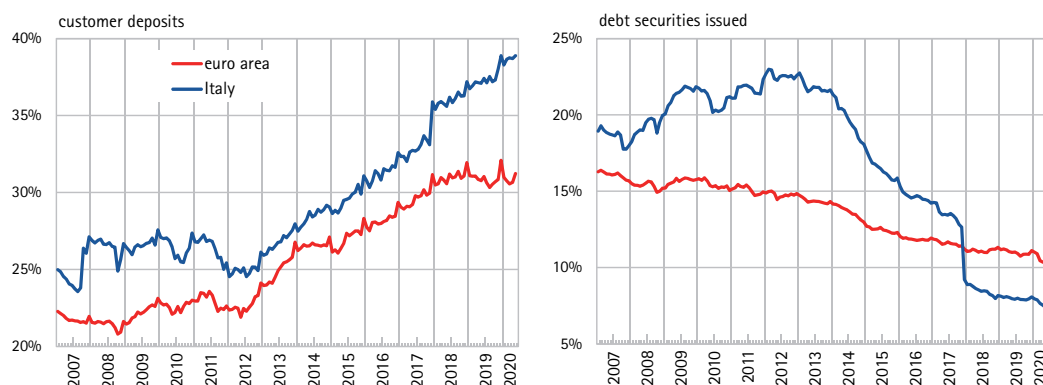


Source: ECB Bank lending survey. The demand for bank loans is defined as the net percentage of banks reporting an increase in demand. For the euro area the indicator is computed as weighted average.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
- 4. Households and mutual funds

The composition of bank funding changed in recent years with a continuous increase of deposits and a concomitant decrease of bonds issued.

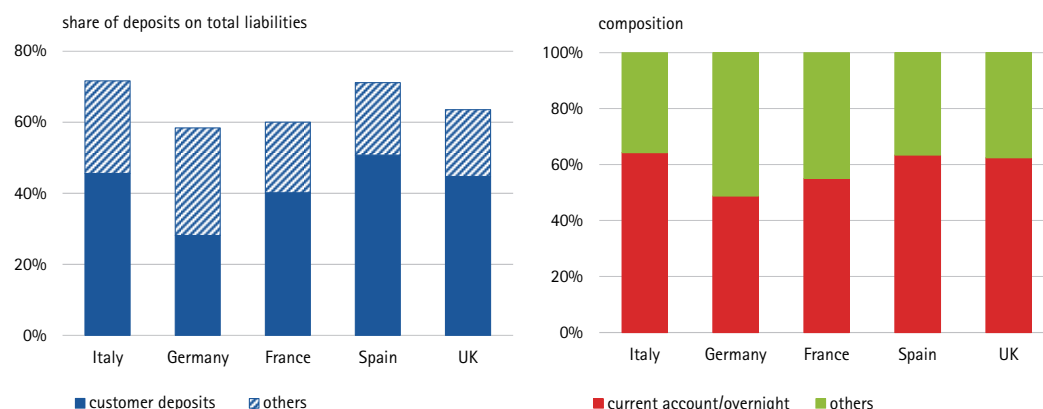
Fig. 75 – Trends in banks' funding in the euro area and in Italy
(monthly data; January 2007 – May 2020; values as percentage of total liabilities)



Source: calculations on ECB data.

At the end of 2019 Italian and Spanish banks exhibited the highest share of deposits on total liabilities with respect to their European peers.

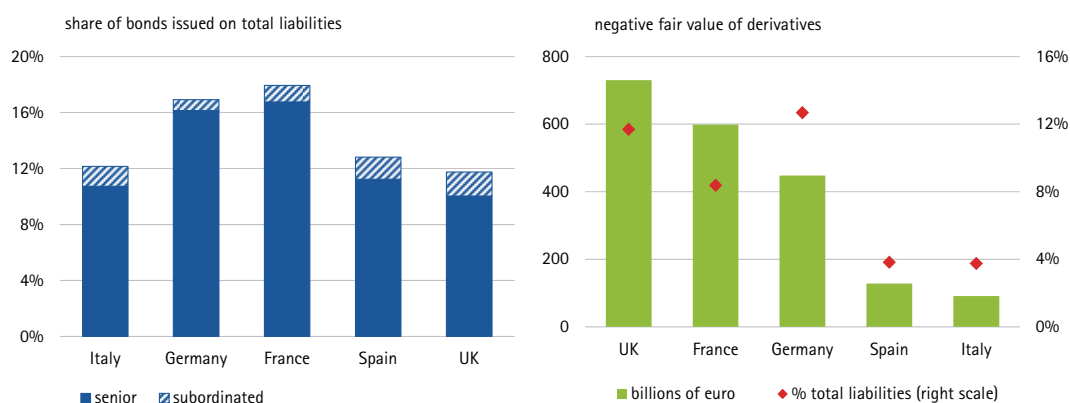
Fig. 76 – Deposits of the major banks in the main European countries in 2019
(percentage values)



Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

Italian and Spanish banks are also characterized by the lowest share of bonds issued (together with the English peers) and by the limited recourse to derivative instruments.

Fig. 77 – Bonds issued and negative fair value of derivatives of the major banks in the main European countries in 2019



Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

1. Economic impact and policy responses
2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
4. Households and mutual funds

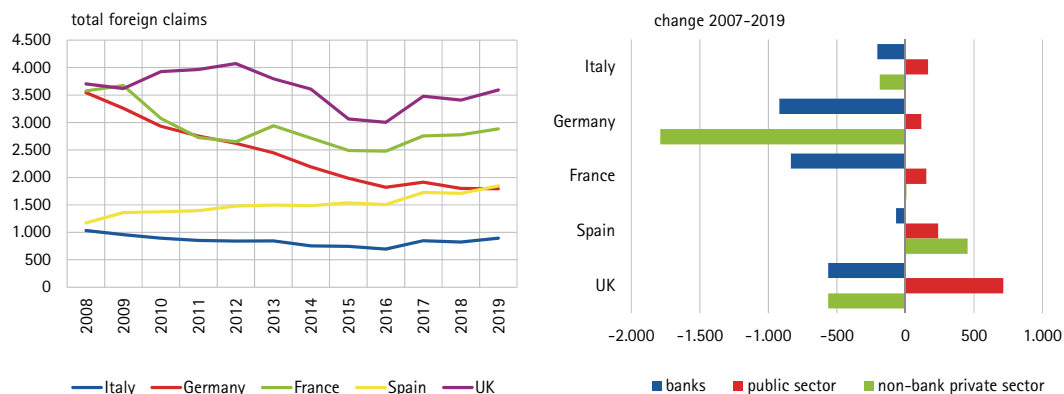
July 2020

Compared to 2007, the financial integration in Europe has decreased, as highlighted by the decline in the foreign exposures of the banks of the main European countries.

However foreign claims of Italian banks remain significant at the end of 2019, in particular with respect to German public and private non-financial sector and to Spanish public sector.

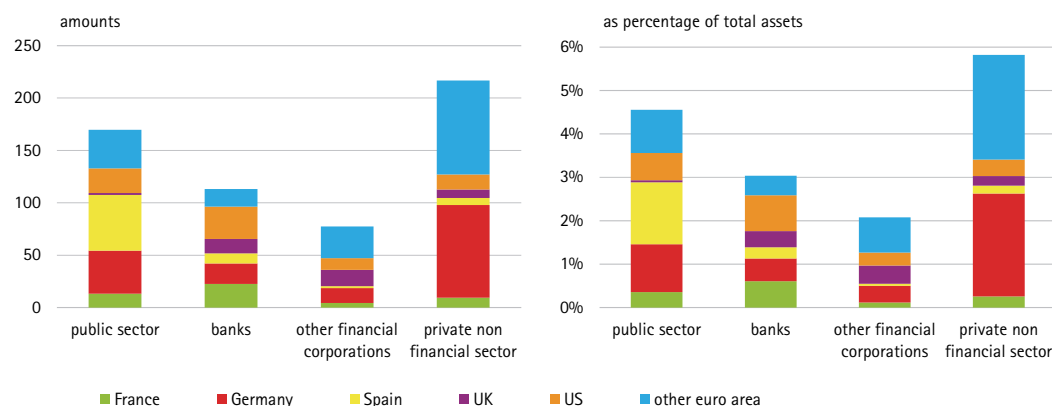
Claims towards Italian counterparts are pronounced for French banks.

Fig. 78 – Foreign claims of banks in the main European countries
(amounts in billions of euro)



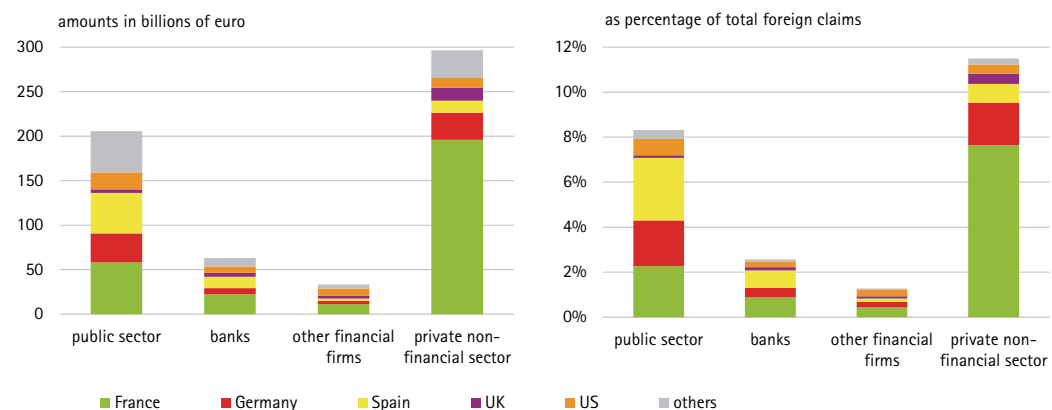
Source: calculations on Bank for International Settlements data.

Fig. 79 – Foreign claims of the Italian banks at the end of 2019
(amounts in billions of euro)



Source: calculations on Bank for International Settlements data.

Fig. 80 – Claims of foreign banks towards Italy at the end of 2019
(amounts in billions of euro)



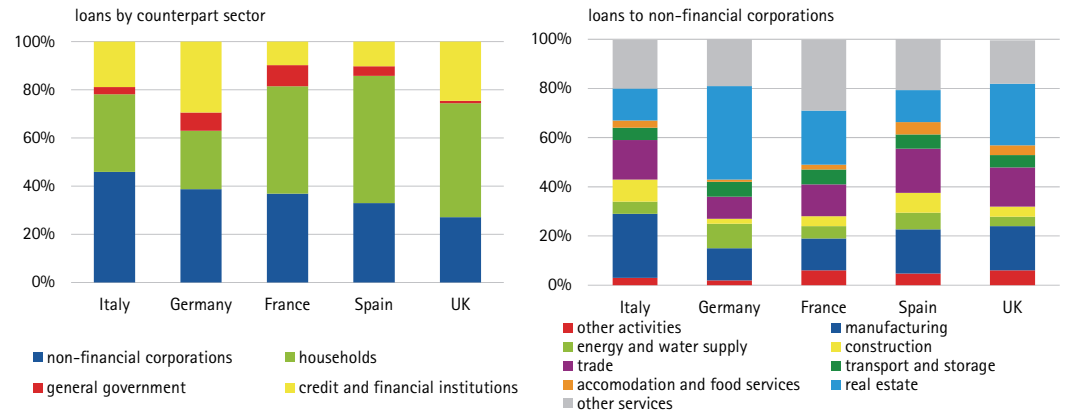
Source: calculations on Bank for International Settlements data.

- 1. Economic impact and policy responses
- 2. Equity and bond markets trends
- 3. Non-financial corporations and banks**
- 4. Households and mutual funds

A source of vulnerability for the Italian banks is the high exposure to non-financial corporations as well as ...

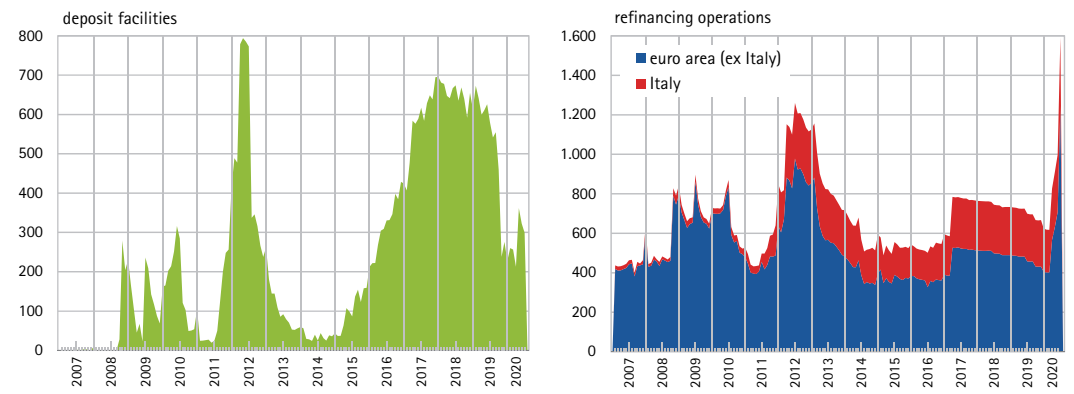
... the risk of an increase in the cost of funding, partly compensated by the wide recourse to ECB refinancing.

Fig. 81 – Composition of loans of the major banks in the main European countries in 2019



Source: calculations on EBA EU-wide Transparency Exercise data, Spring 2020.

Fig. 82 – Deposit liabilities and refinancing operations of the European banks with the Eurosystem (monthly data; January 2007 – June 2020; amounts in billions of euro)



Source: Refinitiv Datastream.

July 2020

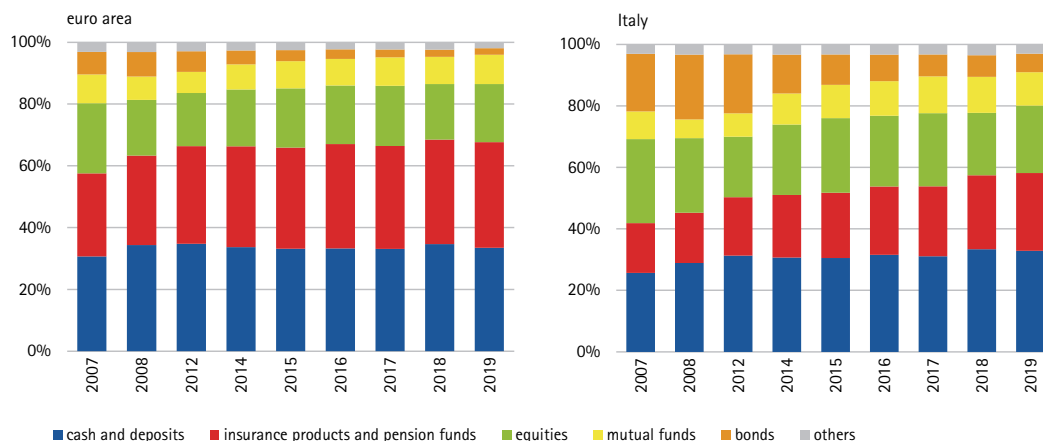
1. Economic impact and policy responses
2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

Households and mutual funds

The long-standing differences in the composition of financial assets between the euro area and the Italian households have become less and less pronounced in recent years. Relative to 2007, at the end of 2019 both euro area and Italian households showed a higher preference for liquidity and an increasing interest in mutual funds.

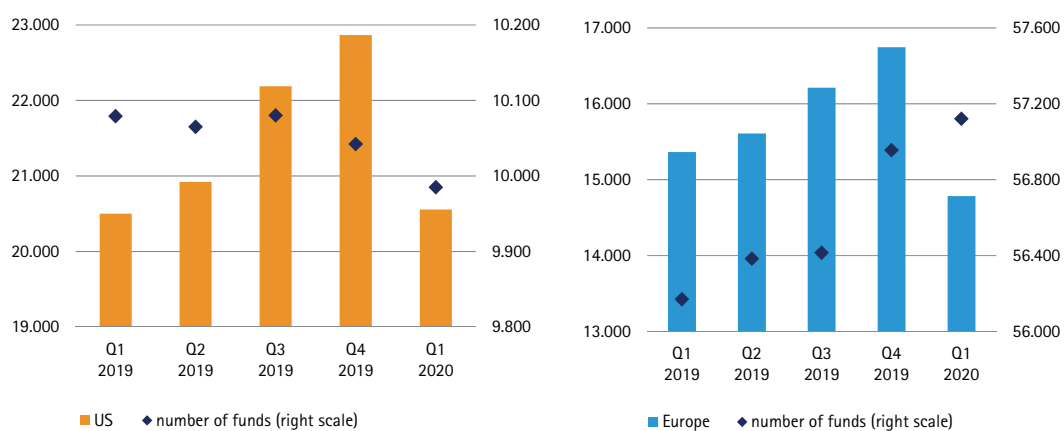
The outbreak of pandemic also affected the asset management sector that showed a sharp contraction in net assets both in the US and in Europe in the first quarter of 2020.

Fig. 83 – Composition of households' financial assets in the euro area and in Italy



Source: Eurostat.

Fig. 84 – Trends in net assets and number of mutual funds in the US and in Europe (amounts in billions of euro)



Source: EFAMA International Statistical Release. Figures do not include funds of funds.

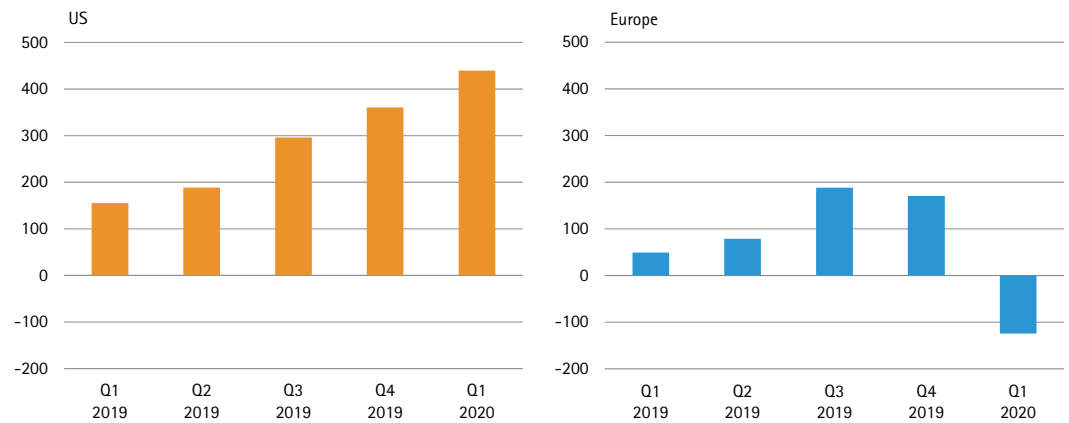
1. Economic impact and policy responses
2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

In Europe the decline in net assets resulted not only from a valuation effect but also from a decrease in net sales, while in the US net sales increased.

Only money market funds recorded positive performance in net sales.

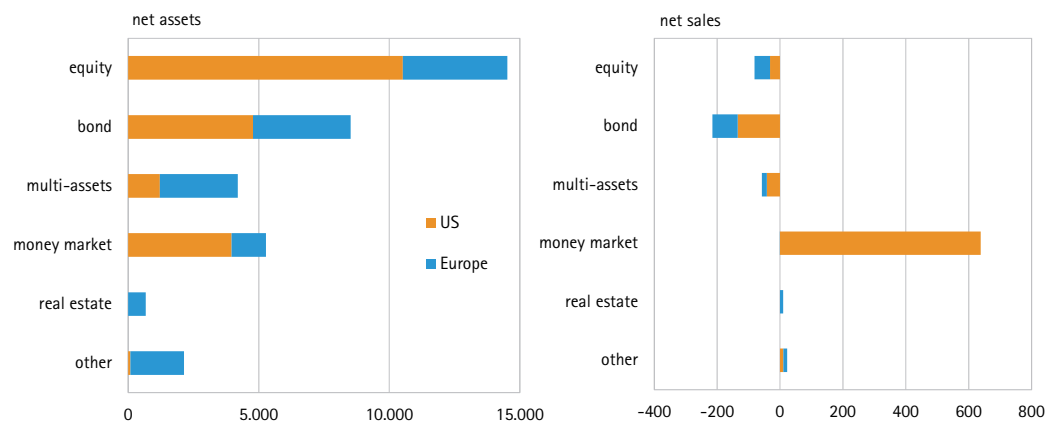
Net sales were negative in all the main European countries with the exception of Germany.

Fig. 85 – Trends in net sales of mutual funds in the US and in Europe
(amounts in billions of euro)



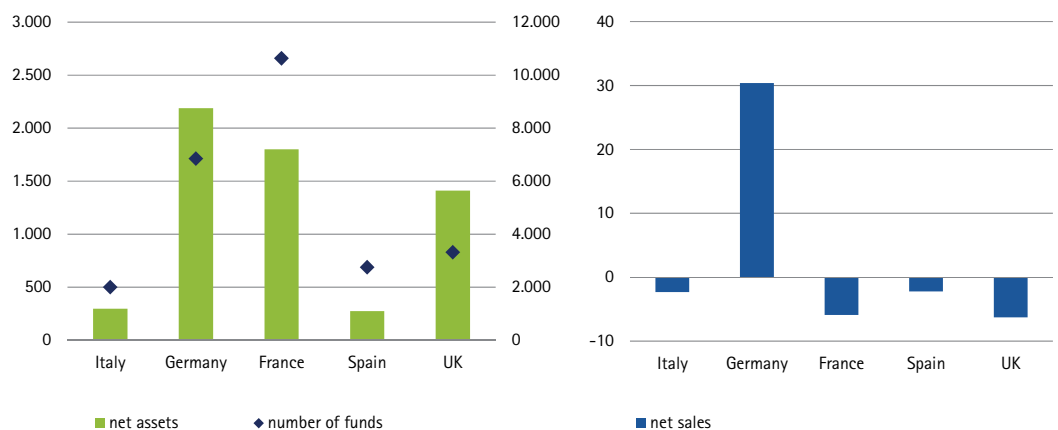
Source: EFAMA International Statistical Release. Figures do not include funds of funds.

Fig. 86 – Net assets and net sales of mutual funds in the US and in Europe in the first half of 2020
(amounts in billions of euro)



Source: EFAMA International Statistical Release. Figures do not include funds of funds.

Fig. 87 – Net assets and net sales of mutual funds in the main European countries in the first half of 2020
(amounts in billions of euro)



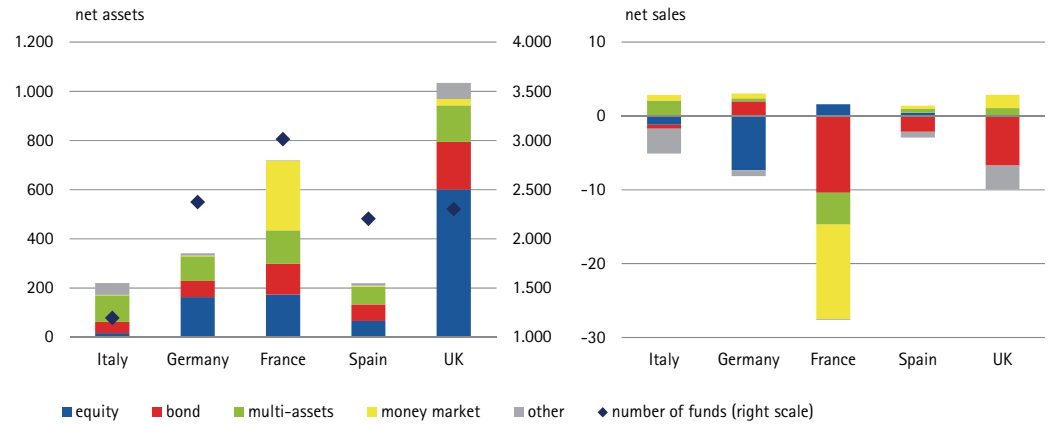
Source: EFAMA Quarterly Statistical Release.

July 2020

1. Economic impact and policy responses
2. Equity and bond markets trends
3. Non-financial corporations and banks
4. Households and mutual funds

UCITs funds showed negative net sales in all countries while ...

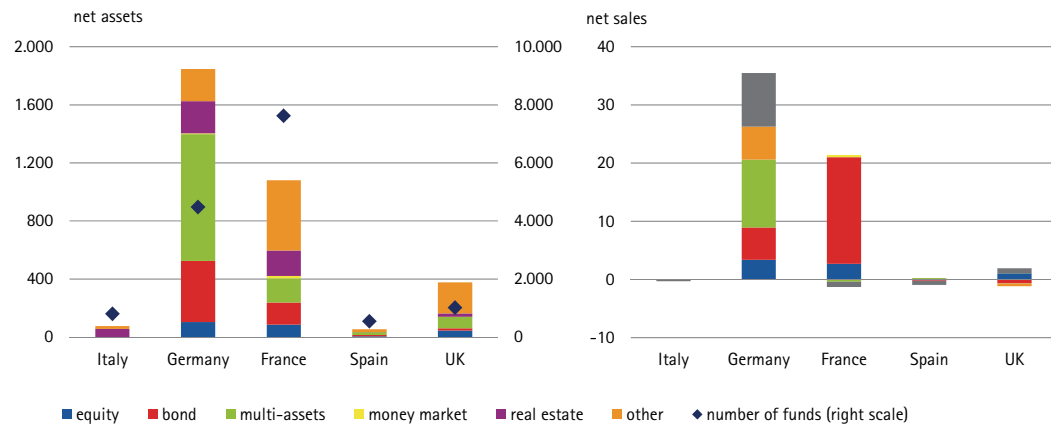
Fig. 88 – Net assets and net sales of UCITs funds in the main European countries in the first half of 2020 by type of fund
(amounts in billions of euro)



Source: EFAMA Quarterly Statistical Release.

... AIFs net sales were positive in Germany and France.

Fig. 89 – Net assets and net sales of AIFs funds in the main European countries in the first half of 2020 by type of fund
(amounts in billions of euro)



Source: EFAMA Quarterly Statistical Release.