Box 2.1 DETERMINANTS OF THE EUROPEAN BANKING SECTOR'S DEBT ISSUANCE COST IN THE CURRENT CONTEXT OF MONETARY TIGHTENING

Access to the financial markets to issue debt is of great importance to the banking sector as debt makes up a significant part of its funding (see Chart 2.8.1 above). Also, markets enable banks to issue instruments in order to comply with regulatory requirements, relating to solvency, resolution and liquid asset holdings. Markets play an important role in this respect, as they have to assess whether or not to acquire the debt issued by banks, and on what conditions, thereby contributing to disciplining banks' behaviour.

Chapter 2 of the FSR shows how, in the context of a sharp monetary policy tightening, bank debt issuance costs are increasing steeply.¹ This box analyses the determinants of the costs of issuing wholesale debt on the primary market for a group of Spanish and other European banks, exploring the relative importance of factors relating to the issuer, the type of instrument and, also, the cost of sovereign debt, which usually acts as a reference for Spanish enterprises.

The database used covers issuances made by a sample of 36 euro area banks² in the wholesale market, during the period 2019-2022. For each issuance, the maturity of the bond, the currency of issue (euro or other), the 10year risk-free interest rate (Overnight Index Swap (OIS)) and the sovereign spread (expressed as the difference between the 10-year sovereign bond yield and this riskfree rate) are considered.

Along with the issuance characteristics and sovereign rate references, the financial ratios of the issuing banks are also included in the analysis. In particular, the CET1 solvency ratio, the return on assets (ROA), the net stable funding ratio (NSFR) and the leverage ratio are also considered. In addition, the issuing bank's credit rating is also included.³ And indicators of the relative cost of issuing a type of instrument according to its degree of subordination are also included in the regressions.⁴

First, a higher sovereign risk premium and a higher riskfree interest rate are seen to be passed through to bank debt issuance costs. In this respect, the increase in the OIS was fundamental in increasing the cost of bank debt in 2022, this being one driver of the homogeneous rise for the banks of all euro area countries. At the same time, the impact of sovereign differentials, relative to the OIS, has been uneven across countries, contributing to a relatively lower bank debt issuance cost in Germany, France and the Netherlands (see Chart 1).

Second, the results also indicate that more profitable banks with a lower leverage ratio have a lower cost of financing, showing the importance for the markets of banks' financial strength.⁵ For Spanish banks, a better leverage ratio and higher profitability than the euro area banks' average appear to be associated with a reduction in their debt issuance costs (see Chart 1).

Financial ratios are significantly heterogeneous across banks and their effect on the cost of debt cannot be properly measured when institutions are grouped by country. Thus, the cost of debt for banks with different profitability and leverage ratios is also investigated, while keeping other factors constant. Notably, despite the average increase in 2022 in the risk-free interest rate, banks with better solvency and profitability conditions (in the 90th and 95th percentiles) have seen their financial cost increase by 0.7 pp less than banks that have these ratios in the middle percentiles of the distribution (see Chart 2).

¹ See also, for the euro area as a whole, the following speech on the impact of interest-rate hikes on financial conditions: P. Lane, "The euro area hiking cycle: an interim assessment", *Dow Lecture*, National Institute of Economic and Social Research.

² Including banks from Belgium, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal and Finland.

³ It is included in the regression as a categorical variable that takes values from 0 to 19, where 0 corresponds to the highest credit rating (AAA) and 19 to the lowest (DD).

⁴ Specifically, interactions between instrument fixed effects (for CoCos, T2, senior non-preferred debt and senior unsecured debt; secured debt being the instrument class used as reference for the others and absorbed in the constant) and the year of issue are included. Thus, the coefficient of these variables measures the additional financing cost of these instruments in each year relative to secured debt. In the event of default, secured debt offers instrument holders better recovery expectations and, thus, the hypothesis is that this category is associated, ceteris paribus, with a lower issuance cost.

⁵ In the period studied (2019-2022), if profitability and leverage are controlled for, there is no statistically significant relationship between other bank-level financial ratios and the issuance cost. The limitation of the time period considered needs to be taken into account, and also the possibility that in other periods with different macro-financial conditions the explanatory power of the different ratios may vary. In any case, the results are consistent with the financial situation of banks being relevant to their debt issuance cost in a broad range of macro-financial scenarios.

Box 2.1

DETERMINANTS OF THE EUROPEAN BANKING SECTOR'S DEBT ISSUANCE COST IN THE CURRENT CONTEXT OF MONETARY TIGHTENING (cont'd)



Chart 3

SPREADS BETWEEN ISSUANCE COSTS AND SECURED DEBT (c)



Chart 2 ISSUANCE COST BROKEN DOWN BY BANK CHARACTERISTICS (b)



Chart 4

RELATIONSHIP BETWEEN PRIMARY AND SECONDARY MARKET COSTS FOR SPANISH BANKS (d)



SOURCES: Capital IQ, Dealogic, Refinitiv, Thomson Reuters and Banco de España calculations.

- a The issuance cost for secured debt relative to the 2019-2022 average for all banks. The regression analysis identifies the ability of aggregate factors (such as the OIS and the sovereign spread) and characteristics of the issuance instrument and of the issuing banks to explain the issuance cost. Explanatory power is summarised in terms of the average 2022 value of the each of the coefficients assessed. The effect of the OIS varies across countries as the 10-year rate is assessed at the time of issuance.
- b The predicted issuance cost with a breakdown by factor for the banks in the various percentile ranges of the ROAA, leverage ratio and bank rating distributions. For example, for the 10th percentile, the banks considered are those in that percentile for each of these three variables describing their financial position. The issuance cost of secured debt relative to the average, considering different percentiles of the variables that have a significant impact on issuance cost, is shown. The average values in 2022 are considered for the variables showing financial conditions (OIS and risk spread) and the specific characteristics of the issue (maturity), so that the same context is assessed for different types of banks. The impact or weight of each of the variables is calculated as the value of the coefficient of each variable multiplied by the value of each percentile.
- c The coefficients obtained in the regression for the interaction between instrument type and year compared with the baseline instrument (secured debt). The vertical lines show a 95% confidence interval.
- d The sensitivity of the cost of debt issued by banks to changes in secondary market prices, excluding CoCos. This is obtained by comparing the rate at issue for the bonds of Spanish banks with the yield on a similar debt instrument on the same day as the bonds were issued. The average secondary market yield is based on a basket of bonds of listed banks, weighted by outstanding amount. A linear regression model is used that takes the primary market price as the dependent variable and the maturity of the issue (in years) and interactions between the secondary market yield and indicators for each quarter as explanatory variables. The vertical lines show a 95% confidence interval.

Box 2.1 DETERMINANTS OF THE EUROPEAN BANKING SECTOR'S DEBT ISSUANCE COST IN THE CURRENT CONTEXT OF MONETARY TIGHTENING (cont'd)

Third, instruments that have a higher probability of absorbing losses in bank resolution or insolvency processes have a higher associated issuance cost. Indeed, the results confirm that there is a risk premium⁶ with respect to secured debt, both for unsecured debt and for instruments issued to comply with subordination rules for resolution, which are known as "non-preferred senior bonds". These premia increase with the degree of subordination. However, premia did not change significantly between 2021 and 2022, confirming that a large part of the increase in the interest rates on bank debt is related to the tightening of financial conditions, without any significant pass-through into higher risk premia, according to the data up to end-2022 (see Chart 3).

Finally, the relationship between the issuance cost of new instruments and the price of bank bonds on the secondary market is examined, for Spanish banks only. The analysis is based on a regression, in which the issuance cost is a dependent variable and the maturity of the issue (in years) and the yield on the secondary market at the time of issue, interacting with fixed quarter effects, are explanatory variables. This approach enables us to see whether the relationship between primary and secondary market costs has fluctuated over time. The secondary market yield is measured using a similar debt instrument on the day the issue is made, using a basket of bonds of listed banks, weighted by their outstanding amount. The results show that the ratio between the yield required by investors in the secondary market and banks' issuance costs in the primary market is very nearly one. Accordingly, the price observed on the secondary market can generally be used to approximate the direction and a large part of the magnitude of the change in the cost of new debt for banks. A notable change was seen in 2022, when the coefficient became statistically greater than one, indicating that the cost of new issuance has been greater than the cost quoted on the secondary market. This has occurred in the context of higher financing needs in the wholesale market, and expectations of rising rates, which encourage banks to bring forward their issuance, given that rates are expected to be higher in future (see Chart 4).

A conclusion that may be drawn from this analysis is that the increase in the bank debt issuance costs in 2022 was due largely to the monetary policy tightening and, to a lesser degree, to the widening/tightening of sovereign differentials, although banks that are highly profitable or have better solvency conditions are managing to issue debt at a lower cost. It is also notable that in 2022 issuance costs increased by more than would have been expected given the behaviour of prices on the secondary market, which suggests that the elevated bank issuance and the context of restrictive monetary policy have reduced the flexibility banks have when implementing their issuance plans.

Bank debt issuance costs increased in Europe in an orderly fashion in 2022, and by far less than under the most pessimistic scenarios that were considered as a result of the rise in uncertainty last year. However, it will be necessary to continue to monitor this market closely. On one hand, the expected increase in monetary policy rates will foreseeably continue to be passed through to issuance costs. Also, issuance costs may be pushed up by general increases in risk premia, associated for example with a reduction in investor appetite for instruments with a high degree of subordination. In this respect, the sharp increase in secondary market CoCo yields, owing to the forced write-down of these instruments following the take-over of Credit Suisse by UBS, should be noted. This was reversed after the joint statement made by the SRB, the EBA and the ECB, which underlined their seniority with respect to common equity instruments (see Box 1).

⁶ To analyse premia by instrument, a categorical variable is included that takes values from 0 to 4, depending on the seniority of the type of instrument as regards loss absorption mechanisms.