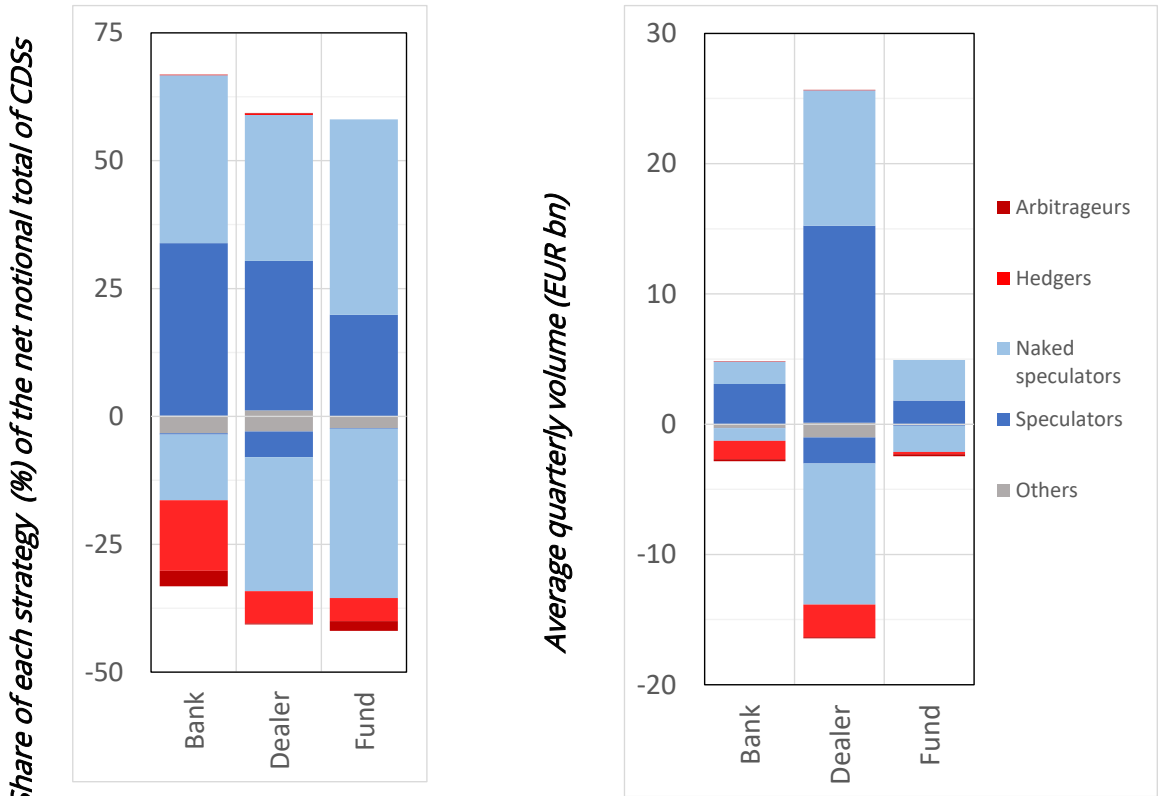


What is the purpose of CDSs?

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Credit Default Swaps (CDSs) are derivatives designed to insure counterparties against the default of a debt issuer. They are traded for arbitrage, hedging or speculative purposes. Between 2016 and 2021, hedging accounted for 19% of CDS purchases by the investors covered by this study. These investors sell more CDSs on the most concentrated debt exposures in their portfolios.

Chart 1: Breakdown of strategies by investor type as a share and by volume



Source: Banque de France.

Note: Negative values correspond to CDS purchases. The 'other' category represents positions for which no strategy has been identified. Average quarterly volumes between Q1-2016 and Q4-2021.

Credit Default Swaps (CDSs) are derivatives designed to insure counterparties against the default of an underlying entity (corporate or sovereign). The buyer pays a premium to the seller, who undertakes to reimburse the buyer in the event of such a default. CDSs are also a synthetic debt instrument, enabling the seller to take a position that is equivalent to holding debt. Their use reallocates the exposure to credit risk, initially borne solely by lenders or bondholders, to financial institutions, because the purchase of a CDS transfers credit risk from the buyer to the seller.

In order to disentangle CDS trading strategies and understand their implications for the reallocation of credit risk, we rely on an original methodology detailed in our working paper [Henricot and Piquard, 2022](#). To do this, we consider in this study a specific population of investors defined by matching debt and CDS holding data, both for the exposures of all French financial institutions to all non-financial corporations (NFCs) worldwide, and for the exposures of all euro area banks and investment funds to French NFCs. To this end, we use regulatory data available to the Banque de France between 2016 and 2021 on holdings of securities, loans and CDSs. Conglomerates with several activities are broken down according to their prudential scope, which makes it possible to disentangle banking, insurance and asset management activities. We identify three strategies based on the relative signs of debt and CDS positions and the timing of their entry and exit from these positions:

- **Arbitrage.** This strategy aims to profit from the price difference between CDSs and debt securities, generally by holding the latter and purchasing a CDS. This price difference may correspond to an illiquidity premium, in the common case where CDSs on NFCs are more liquid than debt securities of the same issuer ([Oehmke and Zawadowski, 2015](#));
- **Hedging.** This strategy enables the buyer to reduce its exposure to credit risk, either in response to a shock or, in the case of a bank relationship, by granting loans without carrying all the associated risk;
- **Speculation.** This strategy makes it possible to increase an initial exposure to debt or to acquire an exposure to credit risk without holding the underlying debt. This is known as naked speculation. Speculation can be used when buying or selling CDSs.

Hedging accounts for a minority of CDS purchases

Chart 1 shows the breakdown of the different strategies by investor type as a percentage of the total net notional amount of CDS, and by amount. Investors include banks, dealers and investment funds. Dealers are the main investment banks. They perform a two-fold role as banks and market makers, acting as intermediaries for transactions initiated by other financial institutions. The study does not cover insurers, given the small number of observations in the sample.

Arbitrage strategies are anecdotal in our sample, accounting for only 2% of CDS purchases. On average, hedging accounts for 19% of CDS purchases (shown in light red in the chart). Most CDS purchases are therefore speculative, aimed at 'betting' on an increase in the credit risk of the reference entity of the CDS purchased.

Banks are the biggest investors in CDSs for hedging purposes. Hedging accounts for 42% of CDS purchases for banks, compared with 18% for dealers and 11% for investment funds. Banks may have a stronger incentive to hedge because buying a CDS reduces the exposure accounted for in capital requirements. Although they are also banks, dealers buy fewer CDSs for hedging purposes. This may stem from the relative scale of their market-making activities, which result in buying or selling CDSs in response to customer demand.

We also run statistical tests to show that banks and dealers tend to hedge their most concentrated exposures more often: an increase of 1 percentage point (pp) in the share of an

exposure to an NFC in the investor's debt portfolio leads to an increase in the probability of hedging this exposure of 31 pp and 113 pp respectively for banks and dealers. These results are driven by both the fixed costs associated with all transactions, and the stronger incentives to share risk on relatively larger exposures ([Atkeson et al, 2015](#)).

CDSs are used by speculative sellers as a *complement* to debt.

Around half of speculative selling involves pre-existing debt exposures (positive values in dark blue in Chart 1). In theory, there are two reasons why investors might sell CDSs. CDSs can be used as a *substitute* for debt to take advantage of their greater liquidity. In this case, investors sell more CDSs on reference entities for which they hold little debt ([Oehmke and Zawadowski, 2015](#)). Alternatively, they can sell CDSs as a *complement* to debt in order to take larger positions on the credit risk of certain underlying entities ([Che and Sethi, 2014](#)). CDSs increase players' investment capacity by requiring less liquidity and capital than a similar debt position. This is also known as synthetic leverage. In this way, they allow investors to gain exposure at a lower cost to a reference entity in which they are optimistic. Analyses suggest that CDSs are used as a *complement* to debt: banks and investment funds sell more CDSs on NFCs to which they are highly exposed.

Naked speculation (positive values in light blue in Chart 1), without holding any underlying debt, by definition makes it possible to diversify the set of reference entities to which an investor is exposed. However, we find that banks and dealers are more likely to sell naked CDSs on companies in countries and at risk levels to which they are already most exposed.

Investors trade CDSs on the riskiest reference entities

Lastly, we show that for a given investor, the probability of trading CDSs is higher on underlying entities with higher spreads and therefore a higher CDS premium. This result holds for all types of investor and all strategies considered. There are four possible reasons for this result: "disagreement" between investors on the level of risk of a reference entity could increase with this risk, encouraging CDS trading. Second, hedging incentives are also greater for the riskiest exposures. Third, the comparative advantage of CDSs on debt in terms of margin requirements could increase with the risk of the reference entity. Lastly, CDS positions are more *opaque* than debt holdings, as they are carried off-balance sheet with an initial market value of zero, which may increase the attractiveness of CDSs for risk-taking.