

Sovereign CDS Contract

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1 Sovereign CDS Contract

Sovereign credit default swap contract, like other CDS contracts, performs similar to an insurance. The protection buyer pays premium in exchange for a contingent payment when a credit event occurs. The short-dated CDS contract is typically used as a primary trading vehicle by large institution money management firms to express their views on sovereign bonds. For emerging market, bonds denominated in specified currencies, governed by foreign law, and issued in external market are generally considered as deliverable. For standard Asian sovereign CDS contract, both bond and loan are included in the deliverable obligation category. However, the bonds or loans with sovereign lender are not considered as deliverable¹. The standard specified currencies include US dollar, Euro, Swiss franc, British pound, Canadian dollar, and Japanese Yen.

The Determinations Committees (DCs) of the ISDA determined whether a credit event has occurred. If so, DC will further provide a list of eligible Deliverable Obligations. There are five

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¹The detailed information about the deliverable obligation as well as the relevant events can be found in the Credit derivative Physical Settlement Matrix.

regional DCs: Americas, Asia Ex-Japan, Australia and New Zealand, Europe/Middle East and Africa (EMEA), and Japan. There are 15 voting members in each of the regional DC, which membership is reviewed annually.

2 Denominated Currency

The denominated currency is also one major difference between the corporate CDS contract and sovereign CDS contract. Typically, the denominated currency of a sovereign CDS contract is a foreign currency rather than its domestic currency. The rationale behind is to separate sovereign risk from the payment of the CDS contract. For example, the market convention is to trade US dollar denominated European sovereign CDS contract and Euro denominated US sovereign CDS contract. However, this does not mean a sovereign CDS contract cannot be written in its local currency. The US sovereign CDS contract can be denominated in both US dollar and Euro. However, the US dollar denominated US sovereign CDS contract is less liquid than the Euro-denominated one.

3 Credit Events

In general, credit event refers to the failure of an reference entity to meet its debt obligation. Typically, the credit events applicable to the standard sovereign CDS contracts include Failure to Pay, Restructuring, and Repudiation/Moratorium. For Latin America sovereign credit default swaps (CDSs) and Emerging European & Middle Eastern sovereign CDSs, Obligation Acceleration is also considered as a relevant event. A sovereign CDS contract typically lists the events that affect the reference obligation. Note that bankruptcy is only included in the list of credit events of a corporate CDS contract, rather than a sovereign CDS contract.

There are hard and soft credit events. Failure to Pay, Repudiation Moratorium, and Obligation Acceleration belong to the hard credit events. A CDS contract is automatically triggered

as long as a hard credit event has been determined to have occurred. Restructuring belongs to the soft credit event. A CDS contract is not automatically triggered when a soft event has been determined to have happened. Loosely speaking, if both protection buyers and sellers decide not to trigger the contract, the CDS will continue until maturity or a future credit event.

4 CDS Auction Mechanism

The goal of CDS Auction is to determine the fair value of the deliverable bond. It can be seen as the price discovery process for the bond value since the cash market will be quite illiquid at that time. Theoretically speaking, the price discovered in a CDS Auction (e.g. 40 cents) should be close to the price at which the same bond is trading in the open cash market. However, the empirical evidence shows otherwise. For example, Coudert and Gex (2013) finds that the final price determined by CDS auction is always lower than the market price on auction day on average regardless the direction of the net open interest (NOI).

CDS is settled through a two-stage, auction-based procedure. The first stage is used to gather information and set constraints for the second stage. The inside market midpoint (IMM) and NOI are determined in the first stage; The second stage is used to produce a final price used in cash settlement. This price is a uniform price for the underlying bonds and is also used to settle all bids to buy or offers to sell the underlying bonds in the action. A CDS protocol document is released by the International Swaps and Derivatives Association (ISDA) before an auction.

5 Regulatory Overhall

5.1 The 2010/2011 German Temporary Ban

The temporary ban on trading naked CDS went to effect in Germany from May 19, 2010 to March 31, 2011. This temporary ban covered all euro area sovereigns, but it only applied to transactions concluded in Germany. Pu and Zhang (2012) shows that the temporary ban could not effectively drive down the sovereign CDS spreads in the debt crisis region. However, the monthly volatility was suppressed in the global sovereign CDS market and this effect was most profound in the GIIPS countries²

5.2 The 2012 EU Permanent Ban

The EU permanent ban was adopted in March 2012³ and went into effect on November 01, 2012. The legislation applied to all SCDS transactions regardless of the geographic location or the legal jurisdiction of the financial institution involved. Moreover, the regulation applied to debt issued by all EEA countries including their agencies and regional, local, and municipal governments (Sambalaibat, 2014; International Monetary Fund, 2013).

To perform a simply analysis on the impact of the permanent short selling ban, we adopt the same method from Pu and Zhang (2012). To be specific, we use October 31, 2012 as the end of month since the permanent ban went into effect on November 01, 2012. The period before the ban is from October 01, 2012 to October 31, 2012 and denoted as the first period. One period after the ban is from November 01, 2012 to November 30, 2012 and denoted as the second period. We only focus on a simply analysis of the short-term difference. We compare the sovereign CDS spreads and monthly volatility one month before and after the ban. Ten countries including five core EU countries and GIIPS countries are used in our analysis. Those

²The monthly sovereign CDS volatility is calculated as the standard deviations of daily returns of sovereign CDS spreads from 19 in the previous month to 18 in the current month.

³The final version of the ban was published on March 24, 2012 and became effective on November 01, 2012.

Table 1: The Impact of the 2012 EU Permanent Short Selling Ban

| Panel A: Impact of the 2012 Permanent Ban on Five Core Countries and GIIPS Countries | | | |
|--------------------------------------------------------------------------------------|----------------------|--------------------|--------------|
| Country | Sovereign CDS Spread | Monthly Volatility | |
| <i>France</i> | -2.49% | +11.89% | |
| Germany | -21.96% | -48.36% | |
| Austria | -20.32% | -38.12% | |
| Netherlands | -15.06% | -47.03% | |
| Belgium | -12.08% | -26.61% | |
| Italy | -2.51% | -43.25% | |
| <i>Portugal</i> | +19.70% | -16.34% | |
| Spain | -3.50% | -51.03% | |
| Greece | -14.81% | -44.86% | |
| Ireland | -18.19% | -52.18% | |
| Panel B: Special Cases: France and Portugal | | | |
| France | Second Period | Third Period | Forth Period |
| Monthly Volatility | +11.89% | -65.68% | -67.24% |
| Portugal | Second Period | Third Period | Forth Period |
| Sovereign CDS Spread | +19.70% | -9.43% | -12.58% |

This table Panel A shows the impact of the 2012 EU permanent ban measured by the percentage changes of the sovereign CDS spread and volatility one month before and after the ban. The period before the ban is from October 01, 2012 to October 31, 2012 and denoted as the first period. One period after the ban is from November 01, 2012 to November 30, 2012 and denoted as the second period. The daily sovereign CDS spreads of each country are averaged into monthly frequency to compute the percentage changes. The monthly volatility is calculated as the standard deviation of the daily percentage changes of the sovereign CDS spreads over a month. Panel B shows the percentage changes of the monthly volatility of French sovereign CDS spreads and the percentage changes of the sovereign CDS spread of Portuguese sovereign CDS for the second, third, and fourth periods. The third period is from December 01, 2012 to January 31, 2013 and the fourth period is from December 01, 2012 to February 28, 2013.

ten countries are Austria, Belgium, France, Germany, the Netherlands, Greece, Ireland, Italy, Portugal, and Spain. For each country, we use the percentage changes to compare the spread and volatility one month before and after the ban. The daily sovereign CDS spreads and bid-ask spreads are averaged into monthly frequency. The monthly volatility is calculated as the standard deviation of the daily percentage changes of the sovereign CDS spreads over a month.

Table 1 Panel A shows that the sovereign CDS spreads and monthly volatility decreased for most countries after the implementation of the short selling ban. For example, the level of Austrian sovereign CDS spreads and monthly volatility decreased 20.32% and 38.12% one month after the ban. We notice that the monthly volatility increased rather than decreased for the French sovereign CDS one month after the ban. To investigate whether this upward trend extends to a longer period. We compute the percentage changes of the monthly volatility of French SCDS spreads for the second, third, and fourth periods. The third period is from December 01, 2012 to January 31, 2013. The fourth period is from December 01, 2012 to February 28, 2013. To be specific, Table 1 Panel B shows that the level of French SCDS's monthly volatility decreased 65.68% in the third period. This means that the level of French SCDS's monthly volatility decreased in the third period compared to the level before the ban. When the third period was extended to February 28, 2013 (fourth period), we obtained similar results. Therefore, we conclude that although the permanent ban did not have a clear short-term impact on driving down the French sovereign CDS's monthly volatility level, the increasing trend was reversed in the later period. We find similar impact of the ban on the level of the Portuguese sovereign CDS spreads as shown in Panel B.

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