

## Il termometro dei mercati finanziari (22 Novembre 2019)

a cura di Emilio Barucci e Daniele Marazzina

23/11/2019 16:37



L'iniziativa di Finriskalert.it "Il termometro dei mercati finanziari" vuole presentare un indicatore settimanale sul grado di turbolenza/tensione dei mercati finanziari, con particolare attenzione all'Italia.

Il termometro dei mercati finanziari						
22-nov-19	Legenda					
Valutazione complessiva		Calma	↑	miglioramento		
			↔	stabile		
		Tensione	↓	peggioramento		
Mercati italiani						
	22-nov	15-nov	08-nov	01-nov	25-ott	
Rendimento borsa italiana	-1,39 ↓	0,23	2,62	1,44	1,29	
Volatilità implicita borsa italiana	15,64 ↓	15,33	15,37	15,02	15,14	
Future borsa italiana	23300 ↓	23555	23515	22870	22565	
CDS principali banche 10Ysub	400,75 ↔	397,10	388,67	393,03	391,98	
Tasso di interesse ITA 2Y	0,00 ↑	0,08	0,01	-0,07	-0,09	
Spread ITA 10Y/2Y	1,29 ↔	1,26	1,26	1,17	1,14	
Mercati europei						
	22-nov	15-nov	08-nov	01-nov	25-ott	
Rendimento borsa europea	-0,65 ↓	0,32	2,09	-0,03	1,26	
Volatilità implicita borsa europea	12,65 ↓	11,76	12,34	12,56	12,78	
Rendimento borsa ITA/Europa	-0,74 ↓	-0,09	0,52	1,46	0,02	
Spread ITA/GER	1,66 ↔	1,66	1,54	1,47	1,42	
Spread EU/GER	0,64 ↔	0,64	0,58	0,58	0,56	
Politica monetaria, cambi e altro						
	22-nov	15-nov	08-nov	01-nov	25-ott	
Euro/Dollaro	1,10 ↔	1,105	1,102	1,117	1,109	
Spread US/GER 10Y	2,133 ↑	2,17	2,20	2,11	2,18	
Euribor 6M	-0,34 ↑	-0,330	-0,334	-0,337	-0,348	
Prezzo Oro	1466 ↔	1467	1467	1511	1509	
Spread 10Y/2Y Euro Swap Curve	0,40 ↑	0,43	0,49	0,41	0,42	

### Significato degli indicatori

- Rendimento borsa italiana: rendimento settimanale dell'indice della borsa italiana FTSEMIB;
- Volatilità implicita borsa italiana: volatilità implicita calcolata considerando le opzioni at-the-money sul FTSEMIB a 3 mesi;
- Future borsa italiana: valore del future sul FTSEMIB;
- CDS principali banche 10Ysub: CDS medio delle obbligazioni subordinate a 10 anni delle principali banche italiane (Unicredit, Intesa San Paolo, MPS, Banco BPM);
- Tasso di interesse ITA 2Y: tasso di interesse costruito sulla curva dei BTP con scadenza a due anni;
- Spread ITA 10Y/2Y : differenza del tasso di interesse dei

BTP a 10 anni e a 2 anni;

- Rendimento borsa europea: rendimento settimanale dell'indice delle borse europee Eurostoxx;
- Volatilità implicita borsa europea: volatilità implicita calcolata sulle opzioni at-the-money sull'indice Eurostoxx a scadenza 3 mesi;
- Rendimento borsa ITA/Europa: differenza tra il rendimento settimanale della borsa italiana e quello delle borse europee, calcolato sugli indici FTSEMIB e Eurostoxx;
- Spread ITA/GER: differenza tra i tassi di interesse italiani e tedeschi a 10 anni;
- Spread EU/GER: differenza media tra i tassi di interesse dei principali paesi europei (Francia, Belgio, Spagna, Italia, Olanda) e quelli tedeschi a 10 anni;
- Euro/dollaro: tasso di cambio euro/dollaro;
- Spread US/GER 10Y: spread tra i tassi di interesse degli Stati Uniti e quelli tedeschi con scadenza 10 anni;
- Prezzo Oro: quotazione dell'oro (in USD)
- Spread 10Y/2Y Euro Swap Curve: differenza del tasso della curva EURO ZONE IRS 3M a 10Y e 2Y;
- Euribor 6M: tasso euribor a 6 mesi.

I colori sono assegnati in un'ottica VaR: se il valore riportato è superiore (inferiore) al quantile al 15%, il colore utilizzato è l'arancione. Se il valore riportato è superiore (inferiore) al quantile al 5% il colore utilizzato è il rosso. La banda (verso l'alto o verso il basso) viene selezionata, a seconda dell'indicatore, nella direzione dell'instabilità del mercato. I quantili vengono ricostruiti prendendo la serie storica di un anno di osservazioni: ad esempio, un valore in una casella rossa significa che appartiene al 5% dei valori meno positivi riscontrati nell'ultimo anno. Per le prime tre voci della sezione "Politica Monetaria", le bande per definire il colore sono simmetriche (valori in positivo e in negativo). I dati riportati provengono dal database Thomson Reuters. Infine, la tendenza mostra la dinamica in atto e viene rappresentata dalle frecce: ↑, ↓, ↔ indicano rispettivamente miglioramento, peggioramento, stabilità rispetto alla rilevazione precedente.

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altra decisione deve essere presa unicamente sulla base di questi dati.

# Covered Interest Parity Violations from Collateral Rates

a cura di Andrea Pallavicini

18/11/2019 17:38

Since the financial crisis of 2007 banks and financial institutions, which were so far considered as default-free corporations, started being suspicious about the liquidity availability and credit worthiness of their counterparts. Borrowing money, even for short maturities (under one year), became more expensive, as banks charged their counterparts higher rates for unsecured lending. The shortage of funding sources forced central banks to adopt a number of non-standard measures to support financing conditions and credit flows both in domestic and foreign currencies. For instance, new swap lines between US and EU central banks was announced on December 2007 to facilitate funding in US dollar.

In this contribution we wish to highlight the violation in the covered interest parity (CIP) due to sign of distress in the markets. We start from the analysis done for the Japanese banking crisis in the nineties, and we apply them in the European system during the crisis. In particular, we look at reliable interest-rate indices sensitive to the market turmoil.

As discussed in Covrig et al. [2004] and in Shabani et al. [2016], in the aftermath of the 1989 stock market crash, the Japanese economy slowed down entering a prolonged slump. The soundness of the Japanese banking system weakened culminating with several highly important financial institutions defaulting in 1997. Insolvency in the banking sector highlighted the increasing inability of Japanese banks to access unsecured funds in foreign currencies, and to a lesser degree also in Yen. The CIP failure led to the emergence of a premium on borrowing costs of Japanese banks in the international financial markets, which we can term cross-currency basis.

In order to measure the funding premium we look at two interest-rate indices based on offered funding rates coming from the contributions of two different panels of banks. We consider the Tibor index published by JBDATA<sup>1</sup>, which is based on a panel of Japanese banks, and we compare it to the JPY Libor index published by ICE<sup>2</sup>, which in turn is based by a panel of international banks. Both the indices should represent the same funding rate in normal market situations, while a basis is a measure of the funding stress present in the Japanese banking system. In Figure 1 we show the difference between the Tibor and the JPY Libor indices. We can see the explosion of the basis during the banking crisis of the nineties. During the credit crunch the basis changed sign reflecting the delay of contagion effects in the Japanese economy. In the latest period the impact of the 2011 tsunami and the cash injections provided by quantitative easing policies are clearly visible.

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<sup>2</sup>The opinions here expressed are solely those of the author and do not represent in any way those of their employers.  
<sup>3</sup>The index definition can be found at [www.zenginkyo.or.jp/en/tibor](http://www.zenginkyo.or.jp/en/tibor).  
<sup>4</sup>The index definition can be found at [www.theice.com/liba/libor](http://www.theice.com/liba/libor).

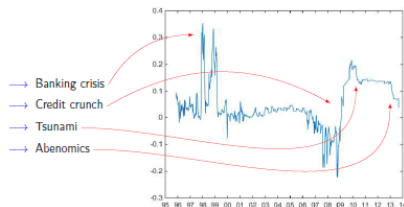


Figure 1: Sign of distress in the Japanese banking systems. Difference in % between the 3m JBDATA Tibor rate minus the 3m ICE JPY Libor rate. A positive basis is interpreted as higher funding costs in JPY for Japanese banks than for international banks.

We can repeat the same analysis for the Euro zone during the credit crunch. Market frictions and dislocations, which were already present before the crisis, strengthened. This happened both in single-currency money markets and in FX swap markets. In particular, cross-currency absence-of-arbitrage relationships involving market quotes of FX forward rates and single-currency zero-coupon bonds displayed severer violations. This problem is discussed in Baba et al. [2008], where the authors search for an explanation of the failure of CIP conditions between USD and EUR, GBP and JPY during the crisis period. They identify three causes: (i) the market perceiving European financial institutions more risky than US ones, (ii) the shortage in US dollars of non-US financial institutions leading to one-sided order flows concentrated on US dollar borrowing, and (iii) the difficulty to size the borrowing costs in the money market by means of the Libor rate. Their analysis is completed in Baba and Packer [2009] with the discussion of the effects of central bank's policies to contrast the liquidity shortage. The evidence of a positive premium paid by non-US financial institutions to fund in US dollars is also discussed in Coffey et al. [2009], Ossolinski and Zurawski [2010], Mancini Griffoli and Ranaldo [2012], and Filipozzi and Staher [2013]. Moreover, the presence of different time zones around the world also contributes to the segmentation across currencies. The Payments Risk Committee (Payments Risk Committee [2012]), in a research sponsored by the Federal Reserve Bank of New York, tracked the USD intraday flows among financial institutions and clearing banks. The committee found relative peaks at the beginning and ending of primary eastern US business hours. As clearing houses and FX settlement institutions impose to settle payments at specified times, these USD liquidity peaks do not correspond to the time frame during which European financial institutions are obliged to fulfill USD payments. Hence, European players experience a relative shortage of USD.

We try to repeat the analysis done for the Japanese banking crisis in the case of the European system during the crisis. We consider again two different funding indices: The Euribor index published by EMMI<sup>3</sup>, which is based on a panel of European banks, and the EUR Libor published by ICE, which in turn is based by a panel of international banks. In

<sup>3</sup>The index definition can be found at [www.emi-benchmarks.eu/euribor-org/about-euribor.html](http://www.emi-benchmarks.eu/euribor-org/about-euribor.html).

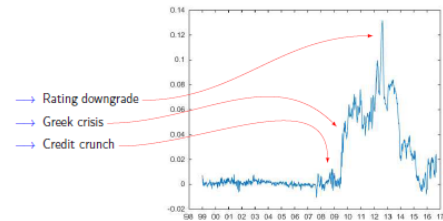


Figure 2: EUR premium. Difference in % between the 3m EMMI (ex EBF) Euribor rate minus the 3m ICE (ex BBA) EUR Libor rate

Figure 2 we show the difference between Euribor and EUR Libor indices. The resulting basis is a measure of the funding stress present in the European banking system. We can see the explosion of the basis during the Greek crisis and the following downgrade of some European countries (Italy breached under "A" notch in 2012). It is interesting to notice that we cannot see any turmoil during the credit crunch. This behaviour could be understood if we assume the same distress is happening in US and EU economies. On the other hand, we cannot completely trust Libor rates after the scandals that recently occurred, see for instance Keenan [2012]. We can try to look closely at the derivative market to see if we are able to extract more reliable information on cross-currency bases.

The failure of CIP has a direct consequence in derivative prices. An investor, funding derivative contracts and hedging instruments along with their collateral accounts, requires liquidity in one or more currencies. Cash in foreign currencies is usually obtained by trading FX spot and swap contracts. Thus, market dislocations may produce additional costs in funding and hedging activities and, during turbulent periods, can also lead to severe liquidity shortages as shown in Barkbu and Ong [2010]. We notice that these funding costs depend on the particular funding strategy adopted by the investor. Indeed, there are different ways to raise money in a foreign currency. For instance, a domestic institution could issue debt notes denominated in a currency other than its domestic one, entering into a loan whose interest and capital repayment at maturity will equally be expressed as amounts of that currency. The actual funding policy adopted by an institution is a collection of different strategies, driven not only by financial factors. Thus, to introduce an arbitrage-free pricing framework we need to select a particular funding policy. This is a problem which is usually faced in funding cost literature, as in Crépey [2015] or Pallavicini et al. [2016], and addressed also in practitioner conferences, as in Kyaer [2015]. Here, we explicitly assume that a domestic investor can fund in foreign currencies only by means of FX swaps. Thus, prices of derivative contracts with cash flows or collateral accounts expressed in foreign currencies should include funding costs originating from the FX swap market, as shown by many authors by following different approaches. We cite among them Piterberg [2012], McCloud [2013], Fujii and Takahashi [2013], Giménez et al. [2017], and Moreni and Pallavicini [2017].

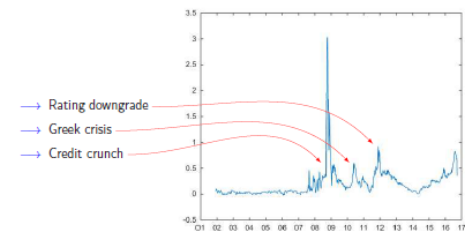


Figure 3: Cross-currency spread. Difference in % between the EUR collateral rate and the rate implied by CIP relationships from USD collateral rates. Both rates are accrued over a 3m period.

Here, we focus only on liquid instruments which are usually traded under collateral agreements with daily margin posting remunerated at the overnight rate. In Figure 3 we show the difference between EUR OIS rate, the usual remuneration rate for deal collateralized in EUR, and the rate implied by CIP relationships from USD collateral rates. The resulting basis is a measure of funding stresses as seen by derivative markets in EUR and USD. We can see now the great impact of the credit crunch.

In the latest years indices based on offered funding rates like Libor went through a complete revision process, see for instance the guidelines presented in Wheatley [2012] the review commissioned by the UK HM Treasury. Some of these indices will be discontinued in a short period, other, as Euribor, are surviving with a different definition. In this presentation we have seen that relying on these indices to extract information on the violation of CIP relationships may be misleading. On the other hand, the liquid derivative market is collateralized, so that we can consider collateral remuneration rates as reference rates for our analysis. Finally, if we put together the market quotes of these rates along with FX data we are able to see the emerging cross-currency basis.

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## Rilevazione sui prodotti derivati over-the-counter a giugno 2019

23/11/2019 16:42

La Banca d'Italia comunica le informazioni relative alle posizioni in derivati over-the-counter (OTC) a fine giugno 2019...

[https://www.bancaditalia.it/media/comunicati/documenti/2019-02/Comunicato\\_OTC\\_20112019.pdf](https://www.bancaditalia.it/media/comunicati/documenti/2019-02/Comunicato_OTC_20112019.pdf)

## MiFID II: il Governo approva in esame definitivo le modifiche al decreto di attuazione

23/11/2019 16:40

Il Consiglio dei Ministri riunitosi ieri, 21 novembre 2019, ha approvato in esame definitivo le disposizioni integrative e correttive del decreto...

<http://www.diritto bancario.it/news/servizi-di-investimento/mifid-ii-il-governo-approva-esame-definitivo-le-modifiche-al-decreto-di-attuazione>

## The future of the euro area economy

23/11/2019 16:39

It is a pleasure to be speaking here this morning at the European Banking Congress. This is my first opportunity to meet the mayor and Frankfurt's financial community - and I am sure it will be the first of many...

<https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp191122~0c1f115db0.en.html>

## What Indian Crypto Exchanges Are Doing to Protect P2P Users

23/11/2019 16:38

With the Supreme Court of India postponing the crypto hearing, the Indian crypto community is calling for better protection when trading on P2P platforms..

<https://news.bitcoin.com/what-indian-crypto-exchanges-are-doing-to-protect-p2p-users/>

Direttore: Emilio Barucci.

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