

# Ace of Basis: Green cash-CDS basis to drive transition

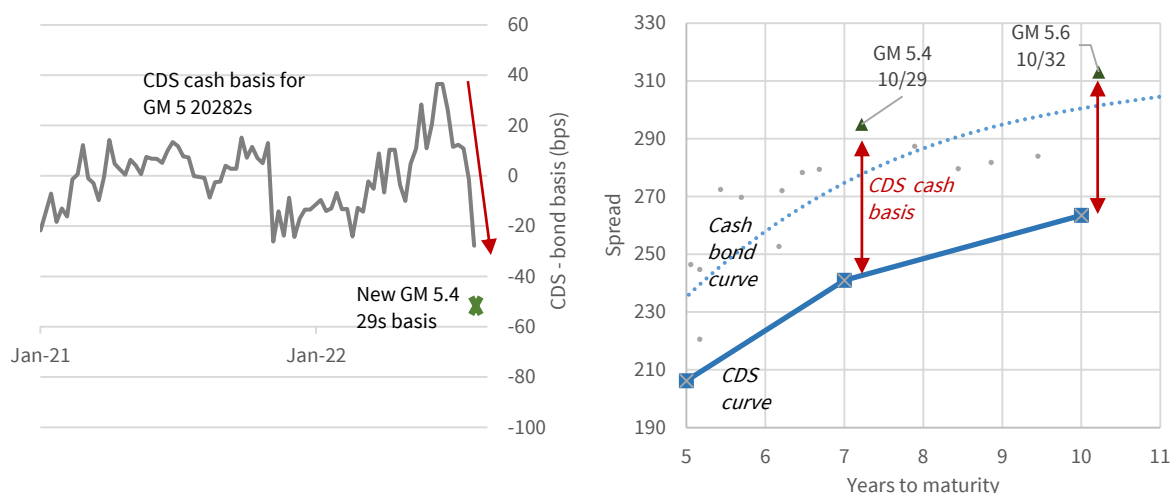
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Green negative basis packages, whereby an investor buys a green bond of a company and buys protection in CDS to hedge out the general company risk, are a strategy to drive relative funding costs for green bonds tighter, without an explicit position to the company's credit. There are currently attractive entry opportunities, which makes this a cost-efficient tool to drive transition.

Traditional negative basis trades are used not to express a directional view on a credit but to take advantage of bond technicals. Similarly in the context of a green bond, an investor can buy "the green bit" of a company they do not like from a fundamental standpoint without exposing themselves to the credit per se. We illustrate the concept by looking at the recent GM green bonds issued last week with a significant negative basis, meaning that the bonds have a wider spread than the equivalent CDS. As shown in Figure 1, this basis has recently moved negative. Below we also elaborate on the moves for green bonds basis across the Auto sector in USD and EUR.

From an impact point of view, usage of green negative basis packages could act to further increase the demand for green bonds, and so lower the funding cost available to companies, including from investors that have not invested in green bonds in significant amounts.<sup>1</sup>

Figure 1. CDS-cash basis going negative recently (left), and recent GM green bonds coming cheap to cash and CDS curve (right). Pricing as of 29 Jul 2022. Source: Bloomberg, AFII.



<sup>1</sup> Some may refer to negative basis packages as "arbitrages", but they are highly dependent upon a number of parameters, including funding models, and even if a properly constructed package should avoid adding default risk to a portfolio, the basis in itself can be volatile and generate significant mark-to-market fluctuations, as illustrated in Figure 3 below.

## Example: General Motors inaugural green bond issuance

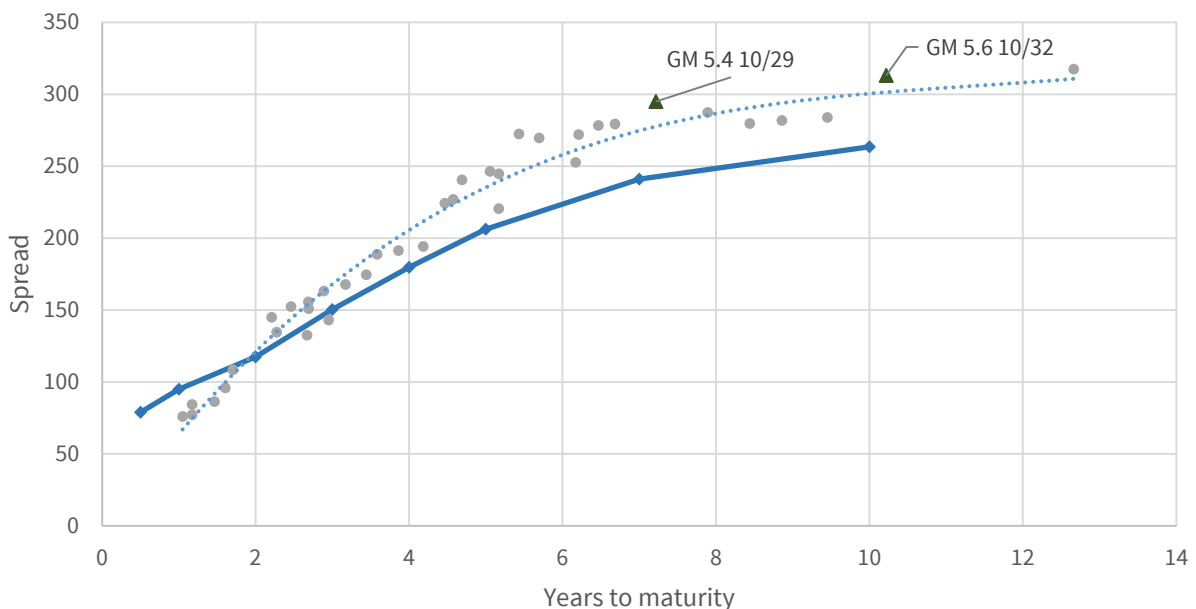
Last week, General Motors completed an inaugural green financing transaction, issuing a 7yr and a 10y green bond.<sup>2,3</sup> The bonds were issued outside the secondary curve (a negative ‘greenium’) but better than the prevailing new issuer premium in the market - see Figure 2.

Both bonds trade a significant negative cash-CDS-basis, meaning that the spread provided by those bonds is substantially higher than the CDS-based cost to protect against default risk of the issuer.

According to our calculations (as well as from the Bloomberg terminal), the basis is in the region of 50 bps. For example, the 7y GM CDS trades at 241bps whereas the GM 5.4 10/29s trade at a z-spread of 296bps, netting a spread differential of 54bps in favour of the cash bonds.<sup>4</sup> Green bonds are deliverable into CDS, and in a default are pari passu with other debt, so we do not anticipate any issues arising from the exact terms of the CDS contract. It is notable how the basis recently and abruptly has turned negative (see Figure 3).

Furthermore, the basis curve is steep at the 3-7y part of the curve, meaning that the basis package could (if the curves hold still) see almost a full 50bp extra roll-down over a four-year horizon, even if in absolute terms the basis does not normalise.

Figure 2. GM cash bonds and CDS curve (all in USD denominated instruments). Source: Bloomberg, AFII.



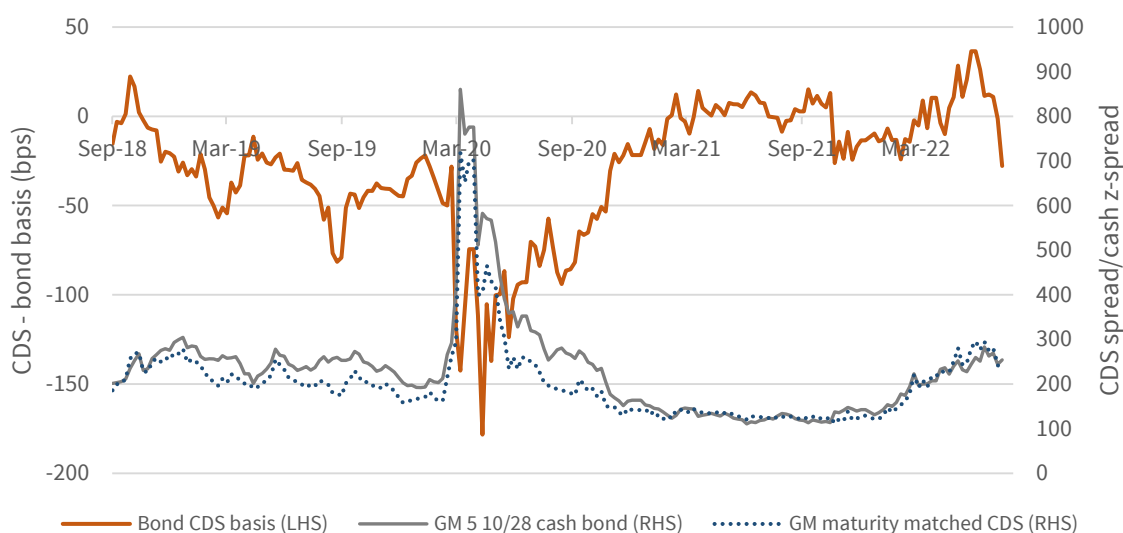
Basis packages are subject to substantial mark-to-market risks. During the great financial crisis in 2008, corporate bond basis went extremely negative as funding for such trades was withdrawn. As show in Figure 3, a similar negative basis pattern was seen during the first months of the Covid-crisis in 2020.

<sup>2</sup> To be clear, the following text is not a reflection upon the green bond framework of GM, or the company’s general climate alignment/transition strategy per se but serves to illustrate the technical opportunities in CDS-cash basis. See [“General Motors and GM Financial’s Sustainable Finance Framework”](#), Moody’s, 26 Jul 2022, for the second party opinion on the recent deal.

<sup>3</sup> For a deal review, see [“General Motors raises US\\$2.25bn from inaugural green bond”](#), IFR, 28 Jul 2022.

<sup>4</sup> Indicative levels. Execution levels on trades will be important to build effective basis packages.

Figure 3. Cash spreads and CDS maturity matched spread and CDS-cash basis for the GM 5 10/2028 bond. Source: Bloomberg.



## Potential impact of basis trades

A question is whether a derivative position such as a CDS, long or short, has any direct financed emissions impact and how we should account for that in the basis trade. A long risk position in CDS does not directly lend any money to the company, nor does a short position directly take funding away from a company, in a similar way that secondary market trading of corporate bonds does not imply a direct funding relationship with a company.

However, the funding implications of secondary market transactions and CDS trades come through changing an issuer's observed credit curve. If investors act in a way that makes an issuer's credit curve go tighter (e.g. by buying secondary market bonds or selling CDS), that issuer will then face a lower spread/cost-of-capital when next coming through the primary market and vice versa.<sup>5</sup>

In the context of negative basis packages, this gives an intuitive understanding as to why the buying of the green bond should lower the cost of funding for green eligible investments, and the buy protection position in CDS should raise it for non-eligible investments, effectively changing relative cost-of-capital for the issuer. In short, the negative basis package and its implied relative cost-of-capital shift operates as a funding incentive for the issuer to transition from grey to green activities.

<sup>5</sup> This can also manifest itself in other ways: for example in terms of pricing of loan facilities.

## Green CDS–cash basis in the Auto sector, USD/EUR

Figure 4 shows green bonds across the Autos sector with indications of where the CDS-cash basis currently trades. Note that these are indicative numbers; especially in the Auto-sector, there can be discrepancies between companies providing car financing as issuing vehicles for bonds relative to the production or holding companies, in terms of what bonds are deliverable into what CDS.

The main take-away from the figure is the difference in basis between currencies, which is funding-related and has technical dimensions to it. With the European Central Bank having been a mainstay of the market for the past half-decade, there is an artificial demand for cash paper relative to CDS, generating a positive CDS-cash basis. In other words, an investor obtains much more spread through selling protection on CDS relative to investing in cash bonds.<sup>6</sup> Turning to USD, we see negative basis opportunities across several names, pre-dominantly yankee issuers like Honda/Hyundai/Kia/Toyota in Figure 4, with the repeated caveat that the bonds and CDS refer to the same entities.

A further intricacy in the CDS-cash basis trade is how to account for bonds trading at discount/below par.<sup>7</sup> The argument could be made that an investor solely looking to protect themselves from default should only be buying CDS amounting to the market value of the bond, rather than the nominal. Everything else being equal, an investor buying 10mn of a bond that trades at price 90 should only need to buy 9mn of CDS protection, thus reducing the negative carry generated from the CDS. With recent moves in cash bond prices as rates have sold off, this could be an interesting factor to consider – we show cash prices for the Auto green bonds in the righthand column of Figure 4.

*Figure 4. Auto sector green bonds, USD/EUR (excluding convertibles). Basis as calculated by the Bloomberg YAS function. Note that we believe the positive basis calculated for the Ford bond is likely be due to a referencing error rather than being truly positive. 144a issue ISIN in cases where there is both a REGS and 144a tranche. Source: Bloomberg, AFII.*

CCY	Bond name	Issuer Name	ISIN	Outstanding (LC/mn)	Years to maturity	Composite rating	Issue date	Z spread	YAS basis	Cash price
USD	F 3.25 02/32	Ford Motor Co	US345370DA55	2500	9.5	BB	11/12/2021	306	112	83.4
	GM 5.4 10/29	General Motors Co	US37045VAY65	1000	7.2	BBB-	7/28/2022	295	-52	100.1
	GM 5.6 10/32	General Motors Co	US37045VAZ31	1250	10.2		7/28/2022	313	-49	100.0
	HNDA 2.534 03/27	Honda Motor Co Ltd	US438127AB80	1000	4.6	A-	3/10/2022	103	-59	96.0
	HNDA 2.967 03/32	Honda Motor Co Ltd	US438127AC63	750	9.6	A-	3/10/2022	132	-88	93.6
	HNDA 2.271 03/25	Honda Motor Co Ltd	US438127AA08	1000	2.6	A-	3/10/2022	70	-26	97.2
	HYUCAP 2.5 01/27	Hyundai Cap. Services Inc	US44920UAT51	300	4.5	BBB+	1/24/2022	167	-111	93.3
	HYUCAP 1.25 02/26	Hyundai Cap. Services Inc	US44920UAP30	600	3.5	BBB+	2/8/2021	156	-111	90.7
	KIAMTR 2.75 02/27	Kia Corp	US49374JAD54	300	4.5	BBB+	2/14/2022	166	-88	94.4
	KIAMTR 2.375 02/25	Kia Corp	US49374JAC71	400	2.5	BBB+	2/14/2022	135	-91	95.9
	KIAMTR 1 04/24	Kia Corp	US49374JAB98	300	1.7	BBB+	4/16/2021	84	-53	95.5
	KIAMTR 1.75 10/26	Kia Corp	US49374JAA16	400	4.2	BBB+	4/16/2021	154	-81	91.3
	TOYOTA 2.15 02/30	Toyota Motor Credit Corp	US89236TGU34	750	7.5	A+	2/13/2020	126	-76	90.0
	EUR	MBGGR 0.75 09/30	Mercedes-Benz Group AG	DE000A289QR9	1000	8.1	A-	9/10/2020	38	107
MBGGR 0.75 03/33		Mercedes-Benz Group AG	DE000A3H3JM4	1000	10.6	A-	3/11/2021	59	97	84.0
RENAUL 4.75 07/27		RCI Banque SA	FR001400B1L7	500	4.9	BBB-	7/6/2022	226	(*)	105.0
VW 3.75 09/27		Volkswagen Int. Finance NV	XS2491738949	750	5.2	BBB+	6/28/2022	107	89	106.4
VW 3.125 03/25		Volkswagen Int. Finance NV	XS2491738352	750	2.7	BBB+	6/28/2022	72	72	103.2
VW 0.875 09/28		Volkswagen Int. Finance NV	XS2234567233	1250	6.2	BBB+	9/23/2020	112	99	89.4
VW 1.25 09/32		Volkswagen Int. Finance NV	XS2234567662	750	10.2	BBB+	9/23/2020	94	150	86.2
VOVCAB 4.25 05/28		Volvo Car AB	XS2486825669	500	5.8	BB+	5/31/2022	334	-5	97.6
VOVCAB 2.5 10/27	Volvo Car AB	XS2240978085	500	5.2	BB+	10/7/2020	311	7	91.1	

<sup>6</sup> Negative rates also play a role here. For an investor who is paying negative interest rates on deposits, it is better to buy a cash bond to avoid that cost compared to holding the cash an run synthetical exposure.

<sup>7</sup> E.g. see "[Understanding basis for discount bonds](#)", Ghosh, Leeming and Rennison, Structured Credit Investor, 14 Jan 2009.

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