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EDUCATION

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Exploring Supply Chain Management

Bloomberg

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INTRODUCING BLOOMBERG FOR SUPPLY CHAIN MANAGEMENT

Universities around the globe use Bloomberg to bring the real world of finance into the classroom. By exposing students to the industry-leading platform for news, data, analytical tools and research that drives the global marketplace, we empower students with the real-world experience they will need to get ahead.

MACRO ECONOMIC ANALYSIS

Bloomberg Supply Chain, SPLC <GO>, offers unique and comprehensive information about supply chain relationships across a wide range of industries. The function displays a visual road map of key customers, suppliers and competitors, thus enabling you to assess a firm's supply chain health and explore potential market risks.

From a supply chain perspective, Bloomberg sets the industry standard, offering source documents in more than a dozen languages across 26,000 companies. We also provide access to detailed, proprietary supply chain relationship data that is unavailable from other sources.

ENRICH YOUR CURRICULUM

SPLC <GO> can enhance the classroom experience by streamlining research on key questions, such as:

- » Who are a company's largest disclosed customers and suppliers?
- » What suppliers are most exposed to a given company?
- » Are any customers or suppliers exhibiting deteriorating financial health?
- » Does a company or its customers/suppliers have geographic concentration risk?
- » Who are a company's tier 2 and tier 3 suppliers?
- » Which customers are seeing changing sales growth or margin pressures?
- » Are there any supply chain overlaps compared with peers?

KEY BENEFITS

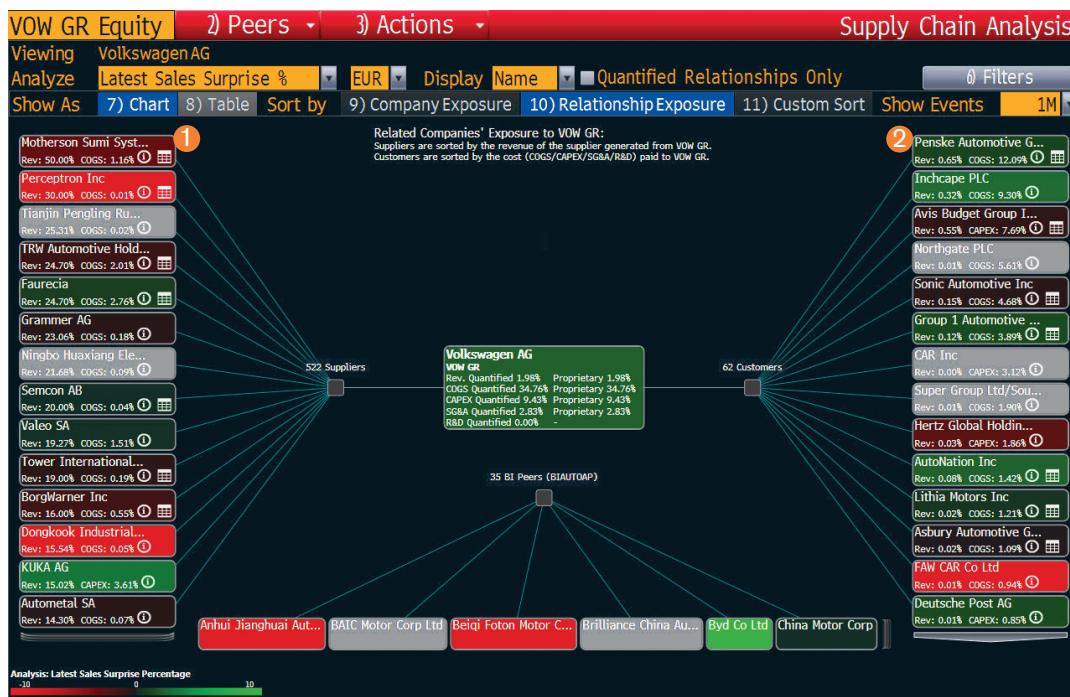
SPLC <GO> offers powerful benefits to business and finance students, including:

- » Reduced time spent gathering and collating data
- » Increased ability to focus on analysis and critical thinking
- » Access to information not readily available in the public domain
- » Integration of classroom theory with a real-world platform
- » Practical skills and experiences useful for competing in the job market

EXPLORING THE SUPPLY CHAIN

In contrast to competitive, peer or sector-based relationship data, supply chain data is focused on actual business relationships between companies. Supply chain data helps uncover money flows between companies on both a customer (revenue) and supplier (expense) basis. This can help SPLC <GO> users to anticipate changes in a company's business based on events within its supply chain.

Quantified business relationships are important drivers within a company's business model. They specify from whom revenues are derived and where cash must be paid to sustain operations. SPLC <GO> provides a visual map of a firm's supply chain, allowing you to quickly understand relationships between firms, assess potential supply chain risks such as high customer and/or supplier concentration and examine any dependencies that could directly impact your investments.



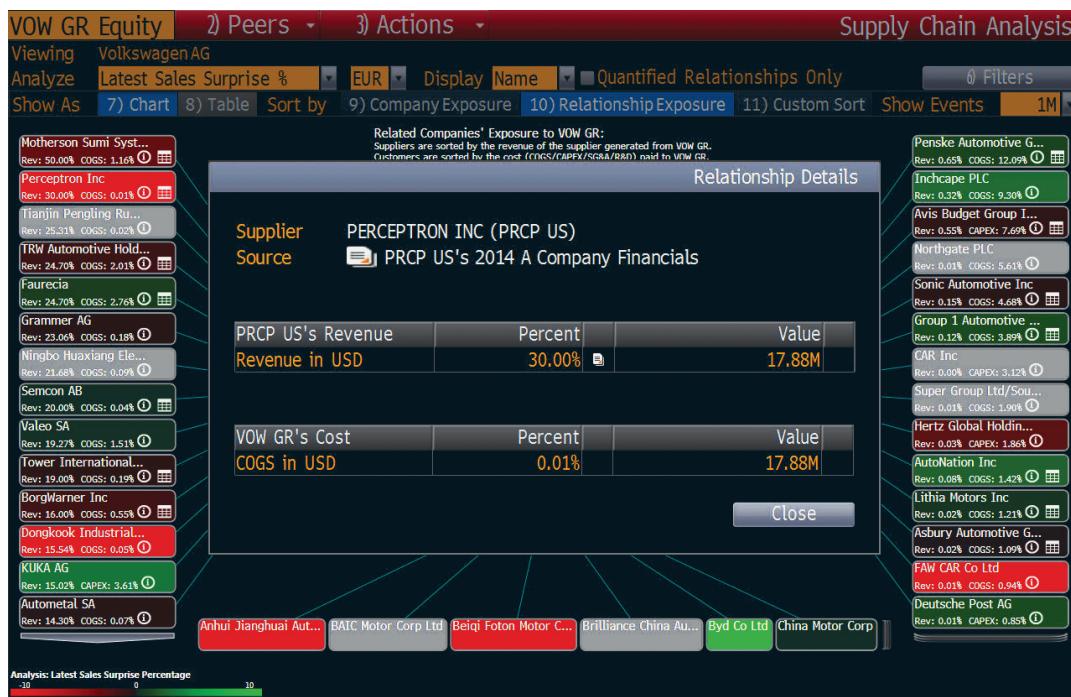
SPLC <GO> – Supply Chain Analytics

- 1 Motherson Sumi is the supplier most exposed to Volkswagen, generating 50% of its sales from the automaker according to company disclosure.
- 2 On the customer side, Penske Automotive spends 12% of its COGS with Volkswagen according to a Bloomberg estimate, the highest percentage of any customer identified by Bloomberg supply chain analysts.

ANALYZE THE FUNDAMENTALS

SPLC <GO> DOES THE HEAVY LIFTING

Unlike most other types of financial information, supply chain data is typically incomplete, with few quantified business relationships mandated globally for public companies. In the U.S., SEC Reg S-K includes a provision that customers representing more than 10% of revenues should be disclosed at least annually. However, updates to this information can be made voluntarily in 10Q filings, investor meetings, press releases and corporate websites, among other channels. Exchanges outside of the U.S. generally lack even this level of relationship disclosure.



SPLC <GO> – Volkswagen supply chain

We scour thousands of financial documents, company presentations, news releases and other sources, so supply chain relationships are continually refreshed and reviewed for accuracy. With more than 1.5 million individual relationships, SPLC <GO> provides unmatched depth and breadth of coverage. In turn, this frees valuable time for students and educators looking to leverage a unique dataset for their supply chain curriculums.

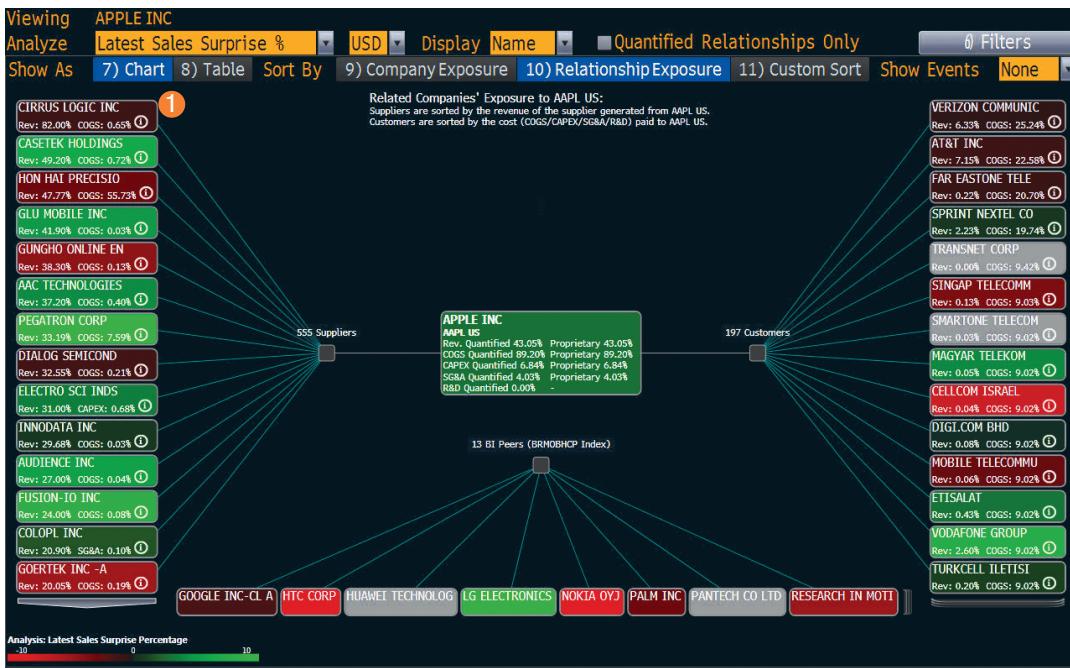
SEEING WHAT'S IMPORTANT

CHART VIEW

The chart view display on SPLC <GO> helps users to visualize important supply chain read-throughs. This can help to generate investment ideas and provide some measure of risk protection to an investment portfolio.

For example, on April 23, 2013, Apple Inc. reported FY13 Q2 financial results, with management noting that lower iPhone® pricing negatively impacted gross margins. The screen shot below shows that semiconductor manufacturer Cirrus Logic is the supplier most exposed to Apple, which accounted for 82% of its FY2013 revenue.

As a result, on May 23, Cirrus Logic told investors that gross margins in the second half of 2013 would move into the mid-40% range because of smartphone pricing pressures. This was down from an expected 50–52% in the second quarter. Cirrus stock dropped 18% following comments from their management.



Apple supply chain showing suppliers, customers and peers.

- ① Cirrus Logic generated 82% of its FY2013 sales from Apple Inc. Highly concentrated customer bases create potential supply chain-related risks.

AN UNRIValed BREAdTH OF DATA

TABLE VIEW

SPLC <GO> gives you the ability to view supply chain data in Table View. This provides an almost limitless amount of Bloomberg data that can be leveraged within the function.

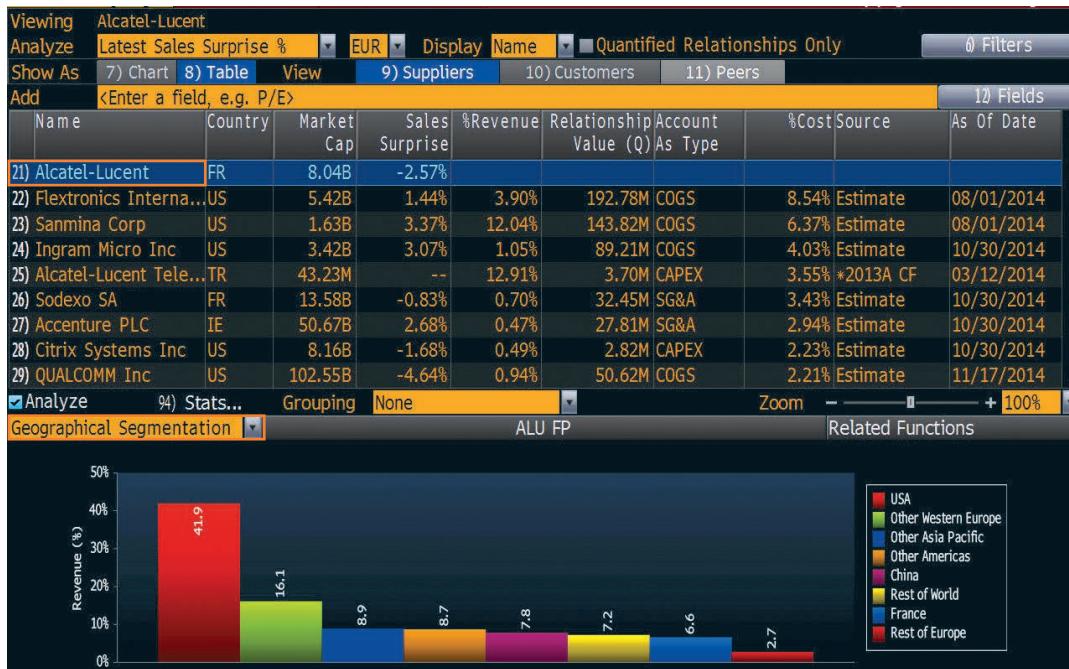
RDSA LN Equity		2) Peers	3) Actions	Supply Chain Analysis						
Viewing	Royal Dutch Shell PLC			Display	Name	Quantified Relationships Only	Filters			
Analyze	Latest Sales Surprise %	USD	Display	Name						
Show As	7) Chart	8) Table	View	9) Suppliers	10) Customers	11) Peers				
Add	<Enter a field, e.g. P/E>					12) Fields				
	Name	Country	GM:Q	Inv Gr / Sales Gr LF	Cash Conversion Cycle LF	ESG Disc P Score:Y Issr ST	Cntry Lgst	Market Cap	Sales Surprise	%Rev
21) Royal Dutch Shell ...	NL	14.64%	1.13	10.42	57.26 A-1+	--	210.16B	-2.26%		
22) Glencore PLC	CH	2.66%	4.64	27.57	51.65 A-2	--	51.19B	11.72%	2.87%	
23) Shell Refining Co F...	MY	-4.16%	0.23	29.96	27.69 --	--	430.12M	--	93.15%	
24) Apache Corp	US	-10.04%	1.04	50.28	34.44 A-2	--	23.46B	5.94%	24.00%	
25) Showa Shell Sekiy... 26) HollyFrontier Corp	JP US	5.62% 6.20%	-3.20 -11.25	40.20 13.71	37.60 16.12	-- --	Japan United States	3.73B 6.26B	-1.69% 18.14%	7.95% 9.00%
27) Noble Corp plc	GB	32.36%	--	--	18.18 A-2	United States	4.33B	0.71%	41.00%	
28) Schlumberger Ltd	US	23.34%	-0.44	7.07	39.67 A-1+	--	105.79B	-0.40%	2.50%	
29) Honeywell Internat... 30) Formosa Petroche...	US TW	29.48% 2.96%	0.14 159.48	66.80 53.96	24.38 A-1 9.50	-- --	United States Taiwan	77.69B 20.28B	0.74% -4.17%	2.53% 2.66%
31) Transocean Ltd	CH	29.25%	-1.99	82.06	23.14	--	6.00B	3.29%	8.77%	
32) Murphy Oil Corp	US	43.69%	-11.05	-191.19	19.92	--	Malaysia	8.53B	2.78%	14.00%
33) Genesis Energy LP	US	5.09%	1.43	11.18	--	United States	4.09B	-20.65%	17.00%	
34) Subsea 7 SA	GB	20.30%	-1.30	-52.47	15.29	--		2.93B	7.05%	10.01%
35) Technip SA	FR	14.45%	--	--	50.00 A-2	--		6.57B	4.91%	3.87%
36) Energy XXI Ltd	US	22.28%	--	--	9.96	--	United States	242.60M	-0.22%	45.00%
37) FMC Technologies ... 38) W&T Offshore Inc	US US	25.15% 12.03%	-0.03 --	120.07 11.20	14.05 A-2 --	--	9.30B 430.49M	0.69% 0.87%	6.89% 48.00%	

Royal Dutch Shell suppliers in table view

The screen below shows an example Table View. Sample data includes supplier gross margins (both reported and projected), inventory growth vs. sales growth, cash conversion cycles, Bloomberg Environmental Social Governance scores, Country of Largest Revenue, S&P credit ratings and interest coverage ratios.

MONITORING GEOGRAPHIC RISK

With SPLC <GO>, you can view a company's revenues by geographic region across the entire supply chain. Students can gauge potential risks or opportunities associated with a particular geographic exposure or display information about specific product line contributions—all based on the most recently reported period.



Geographic concentration in SPLC <GO>

TARGETED RESEARCH

An important feature of SPLC <GO> is the ability to focus on economic sectors or industry subgroups most relevant to your research. The function enables you to filter by source, such as an equity index, market cap, country of domicile or sector.

The screenshot shows the SPLC interface with several filtering options:

- Source:** All Securities
- Market Cap:** Mid (1 Billion to 10 Billion USD)
- Country Of Domicile:** United States
- Sector:** BICS
- Classification:** Oil & Gas Services & Equipment
- Buttons:** Filter Only By Primary Classification, Browse, Include: United States, Exclude: Everything else, Reset, Apply, Close
- Right Panel:** A list of companies with their COGS percentages, including:
 - mosa Petrochemical... : 0.89% COGS: 11.6%
 - jwa Shell Sekiyu ... : 0.51% COGS: 8.16%
 - enntag AG : 0.13% COGS: 5.06%
 - WESS AG : 0.12% COGS: 5.99%
 - try Inc/The : 0.12% COGS: 7.11%
 - ero Energy Tbk PT : 0.11% COGS: 18.3%
 - syJet PLC : 0.10% COGS: 2.7%
 - ta Chemical Co L... : 0.04% COGS: 28.12%
 - L-Mart Stores In... : 0.03% COGS: 0.04%
 - eway Inc : 0.01% COGS: 0.26%
 - kok Shell Oil C... : 0.01% COGS: 37.62%
 - gas Inc : 0.01% COGS: 2.35%
 - plex Industries L... : 0.01% COGS: 5.05%
 - CCAR Inc : 0.01% COGS: 0.30%

Customize your screen with filters...

The screenshot shows the Supply Chain Analysis interface for Royal Dutch Shell PLC:

- Top Bar:** RDSA LN Equity, Peers, Actions, Supply Chain Analysis
- Filter Options:** Viewing Royal Dutch Shell PLC, Analyze Latest Sales Surprise %, Display USD, Quantified Relationships Only, Edit Filters, Show Events 1M
- Section:** RDSA LN's Exposure to Related Companies: Suppliers are sorted by the cost (COGS/CAPEX/SG&A/R&D) paid by RDSA LN. Customers are sorted by the revenue RDSA LN gets from the customers.
- Supplier List:** FMC Technologies Inc, Diamond Offshore Dr..., Atwood Oceanics Inc, Felix Energy Solut..., Bristol Group Inc, CONSOL Energy Inc, Dresser-Rand Group ..., Drill-Quip Inc, MRC Global L Inc, Oil States Internat... (with "More Info" links)
- Central Node:** Royal Dutch Shell PLC (RDSA LN) with its quantified relationships:
 - Rev: Quantified 0.00% -
 - COGS Quantified 0.08% Proprietary 0.08%
 - CAPEX Quantified 2.54% Proprietary 2.54%
 - SG&A Quantified 0.00% -
 - R&D Quantified 0.00% -
- Count:** 10 Suppliers

...to eliminate noise in your supply chain data.

STAY ON TOP OF RELEVANT NEWS

Bloomberg delivers up-to-the-minute news from 146 bureaus in 72 countries. Keep on top of news affecting suppliers with NI SUPPLY <GO> and NI SPLC <GO>—view news stories, Bloomberg Intelligence research and other sources that follow or reference supply chain data.

Search News Sources Display & Edit Custom Searches What's New Page 1 News on Topics
Supply Chain News <Narrow This Search> Sort Time Ordered Translate To English | Change...

1) Chinese Workers at Uniqlo Supplier Go on Strike Over Firings (1)	BN 12:44
2) Mahindra Plans to Supply Airbus, Boeing Parts From India Plant	B BN 03:01
3) Tech Supplier Outsourcing Brings Reputation Risk Balancing Act	BI 14:46
4) Distributor, PBM 2Q Sales Gain May Slow as Specialty Drugs Taper	BI 14:33
5) Press Release from Business Wire : Printronix Inc.	AFP 14:03
6) BNEF Week in Review: Week in Review: Solar set to trump wind in India for th...	BNE 13:15
7) *ETAK: TERMINATION ALLOWS AT&T/IUSACELL SUPPLIER CONSISTENCY	BN 13:10
8) Seeking Alpha: JinkoSolar teams up with Vivint Solar	BLG 12:49+
9) Chinese Workers at Uniqlo Supplier Go on Strike Over Firings (1)	BN 12:44+
10) *ROLLS-ROYCE SAYS SUPPLIERS COULD GET 80% OF WORK VS 70% NOW	BN 12:29
11) *ROLLS-ROYCE TO HAND MORE WORK TO SUPPLIERS TO FOCUS ON R&D	BN 12:29
12) Hundreds of Chinese workers strike at factory supplying Uniqlo	FTI 11:50
13) Rossekhonzadzor increased number of pork suppliers from China to four	IFX 11:36
14) Russia to supply S-300 with improved technical characteristics to Iran - Russi...	IFX 11:21
15) *RUSSIA PREPARING TO SUPPLY S-300 TO IRAN: INTERFAX	BN 11:06
16) *JAGUAR LAND ROVER OPENS NEW PARTS DISTRIBUTION CENTRE IN INDIA	BN 11:02
17) *RUSSIA SIGNS DEAL TO SUPPLY 12 MI-8 HELICOPTERS TO BELARUS: IFX	BN 10:21

NI SUPPLY <GO> – News about supply chains

Search News Sources Display & Edit Custom Searches What's New Page 1 News on Topics
Supply Chain Analysis <Narrow This Search> Sort Time Ordered Translate To English | Change...

1) AMS Falls on Report Apple Is Replacing Its Chips in iPhones (1)	BN 06/10
2) Apple iPads, iPhones Fuel 122% Surge in Hon Hai Sales: Primer	BI 06/10
3) Delhaize, Ahold Shares Advance as Merger Talks Said to Progress	B BN 06/03
4) Consolidated Supplier Base May Pose Risk to Wesco Sales, Profits	BI 05/29
5) Avago to Buy Broadcom for \$37 Billion in Biggest Tech Deal (3)	BN 05/28+
6) Apple, Samsung, Taiwan Semi Key in Avago, Broadcom Supply Chain	BI 05/28
7) HPQ Results 'Slight Positive' for FLEX, STX, WDC: RBC Capital	BFW 05/22
8) Socar Seeks Synergies Via Its Star Refinery Investment in Turkey	BI 05/18
9) Meritor's Reduced Axle Penetration at Daimler May Pare Sales	BI 05/18
10) Sharp Drops in Tokyo on Plan for Job Cuts, Lender Bailout (2)	BN 05/15
11) Sharp Drops in Tokyo on Plan for Job Cuts, Lender Bailout (1)	BN 05/15+
12) Sony Drives 30% Jump in Hon Hai TV Output; Key to Division Sales	BI 05/15
13) Cisco Exposure for Networking Chipmakers Is Double-Edged Sword	BI 05/14
14) U.S. Antitrust Review of Monsanto Deal Will Get Into the Weeds	BI 05/14
15) Sharp to Cut 10% of Global Workforce After Lender Bailout (2)	BN 05/14+
16) EZchip Falls ~26% Pre-Mkt on Largest Customer In-House Plans	BFW 05/13
17) Pegatron Doubles Communication Sales Amid Apple Work: 1Q Review	BI 05/12

NI SPLC <GO> – Bloomberg news and research about supply chain

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