

PAYMENT BEHAVIOR

May 2018

Source: Pexels

**Payment delays up 2 days globally:
Don't lower your guard too early!**

04 Overview by Country and Region

06 Overview by Sector

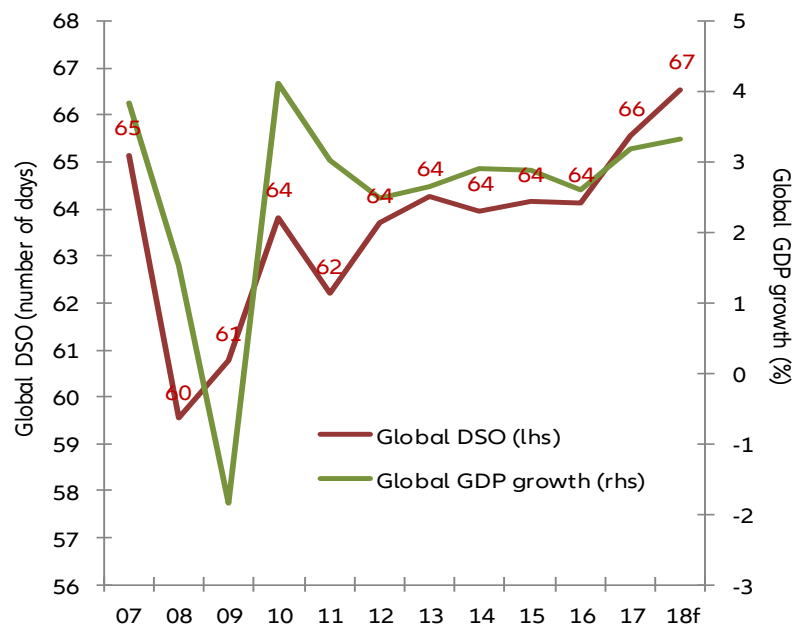
EXECUTIVE SUMMARY



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- Good news on global growth comes with a significant deterioration in payment terms. Days Sales Outstanding (DSO) increased by +2 days in 2017 to 66 days on average worldwide, its highest level since 2007. It had previously been stable for five years, around 64 days. As global growth accelerated, companies extended their trust to their clients through longer payment delays. We expect DSO to rise by one more day to 67 days in 2018, due to the positive economic and financial outlook.
- DSO increased in two out of three countries and two out three sectors in 2017. In particular, DSO increased where it was already high. One company out of four in 2017 was paid by its clients after 90 days. In emerging countries, it was one company out of three.
- Overall, Electronics, Machinery and Construction have the highest DSO (all above 85 days). They are also the sectors where the number of companies with DSO exceeding 90 days is the highest: almost half of the companies in Electronics, two out of five companies in Capital goods and Construction. On the other end of the spectrum, Agrifood, Transportation and Leisure goods companies are paid a lot faster than the global average.
- The US, part of the Eurozone and China experience the highest increase in DSO: (i) DSO increased by +2 days in the US in 2017; (ii) It increased by +2 days (to 66 days) in the euro zone, hiding significant increases (Spain, Portugal, Greece, the Netherlands) and sharp decreases (Italy, Denmark, Finland) ; and (iii) it increased by +3 days in China (v. +1 day on average in Asia), reaching a ten-year high at 92 days.

Chart 1 Change in Global DSO and Global GDP growth



Sources: Bloomberg, Euler Hermes, Allianz Research



Source: Pexels

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PAYMENT BEHAVIOR

PAYMENT DELAYS UP 2 DAYS GLOBALLY: DON'T LOWER YOUR GUARD TOO EARLY!

- In 2017, the average DSO increased by +2 days in 2017 to 66 days. It should increase by +1 day in 2018
- The US, part of the Eurozone and China experience the highest increase in DSO
- Upstream industrial sectors such as Electronics, Machinery and Construction have the highest DSO

The return of growth and trust distract attention from payment discipline

As shown in chart 1, there is a clear correlation between DSO and global economic activity as measured by GDP growth. The economic and financial crisis of 2007-2008 had led companies to closely monitor or accelerate debt collection, reflected in the sharp fall in DSO (-5 days, to 60 days in 2008 on average). The return of growth then allowed DSO to rise to 64 days where it stayed constant from 2012 to 2016 before the back-drop of +2.8% p.a. average GDP growth. We interpret the latest increase in DSO as a certain lowering of the guards and greater trust as a result of stronger growth and optimistic short-term macroeconomic forecasts: GDP growth reached +3.2% in 2017, after +2.6% in 2016. We expect a similar dynamic in 2018, with global DSO rising by one more day, to 67 days.

Widespread lengthening of payment periods

Across our sample of 25,000 listed companies across 20 sectors and 36

countries, DSO rose by +2 days on average globally, reaching 66 days at the end of 2017. After five years of stability at 64 days, DSO reached a ten-year high. Moreover, the spread of DSO around its mean increased in 2017, with one company out of four being paid by its clients within less than 31 days, but one out of four being paid after 90 days. This compares to one out of four companies achieving payment within 88 days in 2016.

The lengthening of DSO reflects a relaxation of payment standards between companies. As global economic health is improving (see chart 1), companies tend to trust their clients to pay them - despite the increase in insolvencies of large companies.

The increase in average DSO in 2017 stems from a global trend observed in most countries. As shown in chart 2, DSO increased in 2017 in two thirds of the countries in our universe. For the most part, they are developed countries, but some are large emerging economies, such as China and other Asian countries, but also Turkey (+3 days) and Brazil (+1

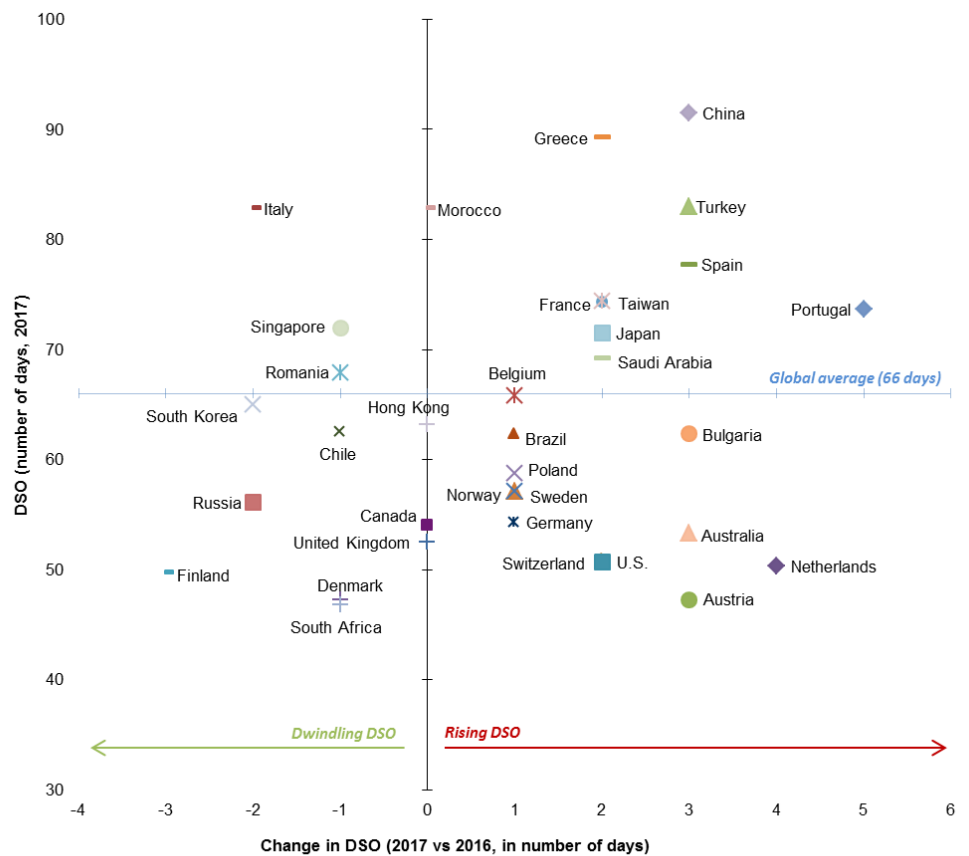
day). In China where the average DSO already by far exceeded the global average, DSO rose by a further +3 days in 2017. By early 2018, it reached 92 days. It is worth noting that DSO increased in twelve sectors out of eighteen in China, compounded by the share of Chinese companies with DSO that exceeded 90 or even 120 days.

In light of relative levels of DSO (see chart 3), three main groups of countries emerge with respect to the global average:

1) The seven strongest countries have an average DSO inferior or equal to 51 days, the country with the lowest DSO globally being New Zealand with 43 days. Other countries with short averages are the Nordic countries (Denmark and Finland), Austria and Switzerland, the US and eventually the Netherlands despite the four-day rise due to the strong increases in the telecom, technologies and support services sectors.



Chart 2 DSO and change in DSO by country



Sources: Bloomberg, Euler Hermes, Allianz Research

2) The group of 7 other countries for which DSO stays below the global average, comprises amongst others Germany (54 days), Canada (54), Brazil (62), and the UK (53) in which it is stable despite uncertainties due to Brexit. We find it noteworthy that Russia is part of the group, with DSO decreasing by +2 days to 56 days, with one quarter of companies being paid under 22 days.

3) Finally, the remaining group of 12 countries with an average DSO superior to the global average of 66 days, such as France (74), Italy (83). China has the highest average DSO (92 days). With respective average DSO of 74 days and 83 days, Portugal and Turkey should be closely monitored as almost one company out of four is paid after four months in these two countries.

The average DSO grew in two-thirds of the countries, being above average in both construction and upstream industrial sectors

We note increasing DSO in almost all sectors while four sectors particularly stand out: Aeronautics (+4 days in 2017, +12 days since 2012), Automotive (respectively +3 and +7), Construction (+3) and Electronics (+3), the sector with the highest a DSO in our universe. There are only four sectors with stable DSO (Food, Household equipment, Machinery, Recreational goods) and two with decreasing DSO y/y (Pharmaceuticals and support Services). DSO is once again far higher in B2B than B2C activities.

The longest DSOs are in sectors with long manufacturing processes, i.e. Aeronautics (72), Automotive (72), Machinery (87) and Electronics (91). DSO in all of these sectors exceeds the global average of 66 days by +6 days or more.

This is also the case for Chemicals, with a DSO of 73 days on average. It is no surprise, as it is a supplier to all industrial activities.

Construction is one of the three sectors with the highest DSO with 85 days: this stems from public works and infrastruc-

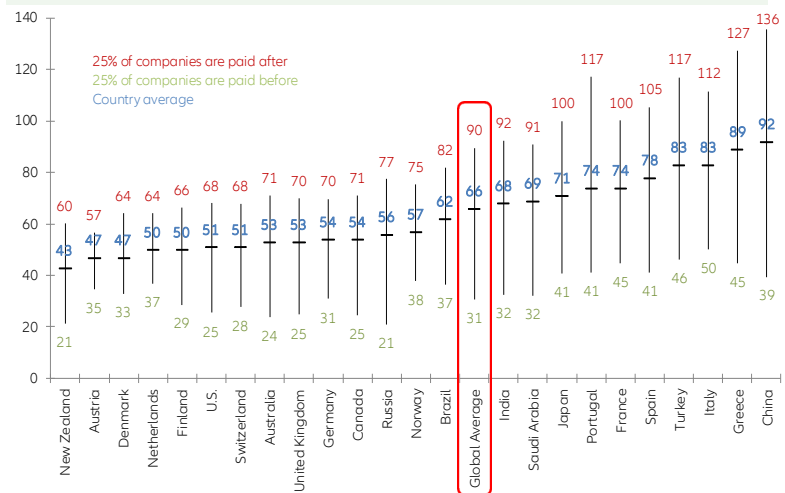
tures, but also from increasing delays in real estate programs. Not overly surprising given the heterogeneous nature of the sector, there is great divergence around the mean. DSO in the Energy (63 days), Metals (58) and Paper (62) sectors stand below our global average. However, the metric for the two former ones increased by +3 and +2 days in 2017, respectively, as a consequence of the increase in commodity prices. As for the Paper industry, the +1 day increase to 62 days can be explained by the rise in online sales.

Finally, Pharmaceuticals is the only B2B sector with a decreasing DSO (-2 days) in 2017, albeit still with (78 days), linked to its particular customer base – mainly public health insurance systems.

At the other end of the spectrum are sectors closer to the end consumer, with DSO far lower than the global average of 66 days, such as Food (46 days), Transportation (49) and Household equipment (49).

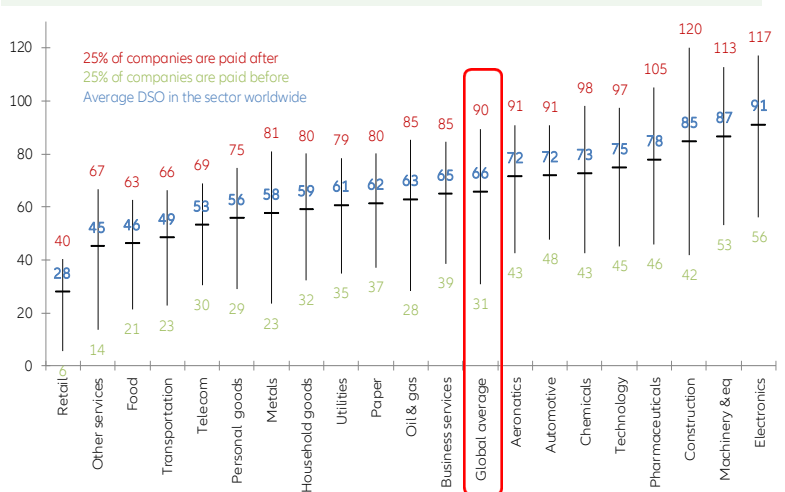
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Chart 3 DSO level and dispersion by country in 2017 (number of days)



Sources: Bloomberg, Euler Hermes, Allianz Research

Chart 4 DSO level and dispersion by sector in 2017 (number of days)



Sources: Bloomberg, Euler Hermes, Allianz Research

Chart 5 Global DSO Heat Map 2017

	Retail	Other services	Food	Transportation	Telecom	Personal & recreational goods	Metals	Household goods	Utilities	Paper	Oil & gas	Business services	Aero	Auto	Chemicals	Technology	Pharma	Construction	Machinery & eq	Electronics	Country average
New Zealand	16	20	47	32	37	40	-	-	41	-	33	54	-	-	-	63	67	55	61	95	43
South Africa	28	33	42	39	44	-	34	-	-	45	17	62	-	-	59	70	77	52	54	67	47
Denmark	23	32	36	41	-	39	-	34	83	-	55	54	-	-	-	58	50	55	64	51	47
Austria	-	38	61	47	-	32	43	-	31	-	73	-	-	27	-	-	-	52	49	-	47
Finland	11	28	29	40	73	43	47	38	-	42	-	54	-	-	-	85	-	37	58	51	50
Netherlands	9	72	44	35	51	35	-	42	-	-	52	60	-	-	57	70	-	42	49	55	50
Switzerland	19	27	39	27	-	47	49	101	67	30	-	62	-	-	74	70	63	49	61	64	51
U.S.	21	40	36	36	43	41	48	40	51	41	57	57	57	57	57	61	62	57	60	62	51
United Kingdom	14	43	48	42	51	42	34	33	58	56	57	56	53	63	75	76	72	42	75	65	53
Australia	28	48	51	44	40	50	47	57	53	49	58	60	93	45	83	62	75	59	62	60	53
Canada	18	40	34	52	50	42	34	57	44	35	85	54	51	-	38	63	68	56	69	83	54
Germany	29	48	39	49	42	41	60	38	48	-	53	69	-	68	45	62	77	51	62	66	54
Russia	26	23	39	26	-	37	60	72	63	43	50	34	75	61	23	68	118	68	65	75	56
Sweden	23	41	51	20	35	48	33	51	15	47	40	66	59	38	92	77	56	67	63	71	57
Norway	8	31	39	46	31	61	51	-	-	-	73	72	-	-	53	60	48	52	62	71	57
Poland	36	44	54	44	46	47	38	55	35	55	40	67	60	43	48	69	71	69	87	80	59
Brazil	60	37	42	39	82	97	44	74	66	67	62	78	58	55	53	71	91	81	56	-	62
Bulgaria	64	28	59	-	-	66	42	72	89	60	63	22	-	58	72	134	85	79	75	41	62
Chile	64	33	55	61	-	77	53	84	63	-	-	57	-	-	103	-	-	74	115	-	63
Hong Kong	29	43	42	54	41	55	53	63	54	65	81	72	-	82	68	74	102	73	99	82	63
South Korea	34	50	46	45	55	57	74	52	73	67	54	52	76	69	64	68	94	63	76	62	65
Belgium	42	56	52	67	62	45	29	-	107	-	-	68	-	-	45	105	67	66	81	71	66
India	46	62	39	58	37	56	58	58	73	44	58	87	92	58	76	93	76	85	77	101	68
Romania	26	22	86	64	-	34	45	52	66	53	67	90	55	92	56	-	149	81	81	75	68
Saudi Arabia	37	45	48	96	105	74	59	92	-	-	-	111	-	-	73	-	-	80	67	154	69
Japan	23	37	52	51	69	63	89	67	47	88	56	60	117	70	99	72	95	111	108	100	71
Singapore	44	35	52	65	42	74	72	72	89	64	98	70	89	65	80	77	57	85	92	85	72
Portugal	17	59	66	99	-	-	-	-	48	46	-	120	-	-	-	113	-	96	-	-	74
France	35	80	63	55	56	49	49	64	79	55	96	92	74	53	60	99	63	75	97	78	74
Taiwan	36	36	48	40	39	57	57	58	42	58	61	71	97	78	74	71	78	71	93	99	74
Spain	20	68	75	46	51	79	54	55	69	49	131	88	-	54	-	109	69	111	93	-	78
Morocco	43	75	62	114	-	-	71	-	79	-	46	-	-	-	-	140	95	85	-	-	83
Italy	41	96	58	73	75	64	-	86	105	-	93	103	55	41	88	98	76	80	91	74	83
Turkey	28	77	70	31	109	75	57	78	42	87	73	56	-	74	83	134	120	123	107	140	83
Greece	48	65	92	44	-	71	110	108	68	-	20	99	-	-	85	121	-	110	109	-	89
China	22	57	37	54	67	61	75	68	56	94	113	91	125	112	84	113	93	123	126	139	92
Sector average	28	45	46	49	53	56	58	59	61	62	63	65	72	72	73	75	78	85	87	91	66

Sources Bloomberg, Euler Hermes, Allianz Research

Reading notes:

A greener color indicates a lower average country or sector DSO; hence a customer base paying faster, consolidating one's cash balance.

Conversely, a more red color indicates a lengthening country or sector DSO that usually brings on problems, especially in case of poor cash balance.

DSO data are available on our Web App [MindYourReceivables](#)

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