

Global High Quality Dividend Stock List

High quality names that pay dividends

Screen for high quality dividend-paying stocks

We have used our quantitative models to find stocks which are high quality compared to their peers, which pay a dividend and are unlikely to cut it. We have chosen names to be representative of different regions and sectors. Finally, we asked our UBS sector analysts to further analyse each name. The full list is on page 2.

UBS Global Quality Dividend Payers Index (Bloomberg: MBCIGQDU Index)

Our stock list forms the basis of the UBS Global Quality Dividend Payers Index, a liquid, tradable, total return index based on our approach.

Consumer staples and health care preferred for dividend safety

Our quantitative models for dividend cuts and forecast dividend growth suggest that the energy and telecoms sectors have the highest risk for dividend cuts and forecast reductions in total dividends paid of -7% and -2% respectively. The models prefer consumer staples and health care, where we forecast growth of 8% in both sectors.

How expensive are income stocks?

High yield names have become less cheap in recent months, as the dividend style has outperformed. The regions where income remains (somewhat) cheap compared to history are Japan and the Emerging Markets.

Equities

Global Quantitative

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Figure 1: 11 names from our high quality dividend-paying screen (full list on page 2)

Sector	Name	Bloomberg Code	Region	Dividend Yield	Mkt. Cap. (\$ millions)
Telecomms	MTS	MBT UN Equity	EM	9.2	9100
Financials	Admiral Group	ADM LN Equity	Europe	7.2	6299
Industrials	Transurban	TCL AT Equity	Asia ex Japan	5.1	15291
Consumer Staples	Imperial Brands	IMT LN Equity	Europe	4.9	41599
Health Care	AbbVie	ABBV UN Equity	USA	4.1	101942
Consumer Discretionary	Anta Sports Products	2020 HK Equity	EM	4.0	7308
I.T.	Taiwan Semiconductor Manufacturing	2330 TT Equity	EM	3.9	144496
Materials	Nine Dragons Paper	2689 HK Equity	EM	3.6	4196
Utilities	Sempra Energy	SRE UN Equity	USA	3.3	25254
Energy	Vopak	VPK NA Equity	Europe	2.9	6076
Real Estate	American Tower Corporation	AMT UN Equity	USA	2.5	45295

Source: UBS Quantitative Research

www.ubs.com/investmentresearch

The High Quality Dividend Stock List

This stock list forms the basis of the UBS Global Quality Dividend Payers Index (Bloomberg: MBCIGQDU Index), a liquid, tradable, total return index based on our approach.

Figure 2: Global High Quality Dividend Stock List

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Microsoft Corp. MSFT UW Equity USA 2.5 48	2.5	USA	MSFT UW Equity	Microsoft Corp.	
Apple Inc. AAPL UW Equity USA 2.1 62	2.1	USA		Apple Inc.	
Capgemini CAP FP Equity Europe 2.0	2.0	Europe		Capgemini	
Largan Precision 3008 TT Equity EM 1.6	1.6	EM	3008 TT Equity	Largan Precision	
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Source: UBS Quantitative Research, Please note that the forecast dividend yield is a calendarised number for the

next 12 months

What are our quantitative models forecasting?

Figure 3 below shows the average (dividend weighted) forecast dividend growth rates in each region according to our quantitative model. Overall our model forecasts a growth rate of 3.6%, and a positive growth rate in every region. The best forecast growth rates are in the US and in Japan.

Forecast dividend growth rates for regions and sectors

The sectors with the strongest outlook for dividend growth are consumer staples and health care. The worst sector for dividend growth is energy, with particularly poor forecasts for the Australian energy firms.

Figure 3: Average forecast dividend per share growth rates (next 12 months)

	Emerging Markets	Developed Asia	Europe	Canada	Japan	USA	Overall
Consumer Discretionary	2.2%	-1.3%	5.8%	15.2%	6.3%	10.8%	6.8%
Consumer Staples	9.5%	14.1%	5.0%	8.2%	13.4%	7.8%	8.0%
Energy	-1.3%	-30.2%	-0.9%	-3.0%	-0.7%	-12.6%	-6.7%
Financials	-2.1%	-0.9%	1.0%	7.0%	4.0%	8.2%	3.1%
Health Care	5.6%	11.7%	3.3%		7.3%	12.4%	8.2%
Industrials	1.8%	-6.5%	3.5%	10.4%	1.0%	10.0%	3.1%
Information Technology	0.8%	5.4%	-1.3%	17.7%	3.7%	10.4%	6.4%
Materials	0.6%	3.6%	4.3%	-0.6%	1.0%	7.1%	3.9%
Real Estate	-0.3%	3.8%	6.6%	-0.1%	7.5%	6.1%	5.2%
Telecoms	-3.0%	3.8%	-7.3%	6.8%	20.0%	-5.6%	-2.1%
Utilities	-3.7%	5.3%	-7.0%	12.0%	3.0%	4.7%	1.1%
Overall	0.1%	1.1%	1.8%	3.9%	4.7%	6.7%	3.6%

Source: UBS Quantitative Research. We show the average dividend weighted forecast growth rate. Data as of December 28th, 2016. Please note that we do not have a value for the Canadian health care stocks due to very small numbers of stocks with data in this region and sector.

Figure 4 shows our dividend weighted average forecast probability of a dividend cut in each region. There is a very clear regional pattern, with Emerging Markets (and to a lesser extent Developed Asia) having a high risk of dividend cuts and the US having a very low risk of dividend cuts. As one might expect, the sectors that appear safest are consumer staples and health care, while the clear outlier on the downside is the energy sector.

Likelihood of dividend cuts

Figure 4: Average forecast probability of a dividend cut (next 12 months)

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	Emerging Markets	Developed Asia	Europe	Canada	Japan	USA	Overall		
Consumer Discretionary	31.2%	32.8%	15.1%	20.7%	10.8%	4.0%	13.4%		
Consumer Staples	25.2%	12.2%	8.2%	5.0%	3.8%	2.9%	6.1%		
Energy	36.3%	83.8%	18.8%	22.1%	14.1%	35.5%	27.9%		
Financials	39.3%	23.3%	22.6%	1.3%	24.9%	11.1%	18.9%		
Health Care	20.8%	4.6%	10.9%		6.5%	1.9%	6.1%		
Industrials	33.0%	33.8%	11.1%	0.4%	21.6%	2.4%	14.5%		
Information Technology	34.0%	4.7%	28.2%	0.1%	18.8%	3.5%	12.3%		
Materials	38.0%	35.5%	14.3%	26.0%	18.4%	5.2%	16.9%		
Real Estate	31.9%	10.7%	11.0%	4.6%	8.0%	8.8%	9.5%		
Telecoms	43.1%	11.8%	27.2%	0.1%	0.8%	16.8%	19.9%		
Utilities	39.4%	13.4%	25.8%	7.8%	15.1%	3.4%	14.0%		
Overall	35.5%	22.3%	17.5%	10.8%	15.8%	7.7%	14.9%		

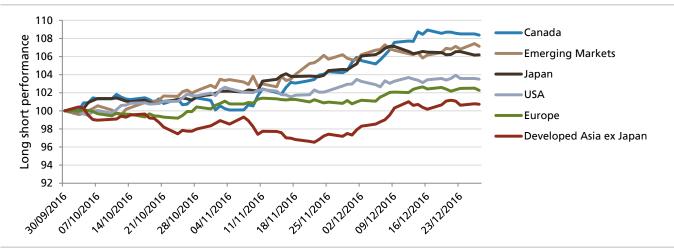
Source: UBS Quantitative Research. We show the average dividend weighted forecast probability of a dividend cut. Data as of December 28th, 2016. Please note that we do not have a value for the Canadian health care stocks due to very small numbers of stocks with data in this region and sector.

Dividend yield in Q4 2016

In Q4, the high yield style outperformed low yield in every region, with three regions: Canada, the Emerging Markets and Japan, seeing gains of over 6%. In developed Asia ex Japan, the high yield strategy underperformed for much of the quarter, but seems to have had a burst of outperformance in late November, ending the year up by 0.7%.

Dividend yield outperforms

Figure 5: Long-short performance of dividend yield over last 3 months



Source: UBS Quantitative Research, Performances have been measured between September 30th and December 28th 2016

Is dividend yield expensive?

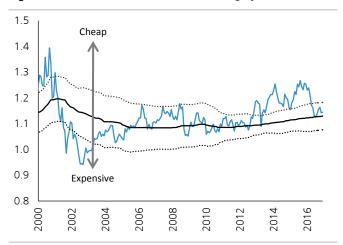
To answer this question we select the 50% of the companies with the highest dividend yield in each region and compare their aggregated book to price ratio with the book to price ratio of their region.

Then we look back through time and compare today's ratio to where it has been historically. This is illustrated in Figure 6 - Figure 11. If the ratio is much higher than it has been historically, that implies that dividend yield looks very cheap and vice versa.

The recent outperformance of the dividend yield strategy has caused the high yield basket to become slightly more expensive in most regions. However, the strategy remains slightly cheap compared to history in all of the regions we consider except Canada. In Japan and the Emerging Markets the book to price of high yield firms is just outside the normal historical range, meaning that, in these two regions, high yield is still notably cheap.

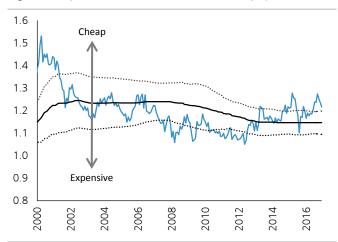
High yield somewhat cheap in Japan and the Emerging Markets

Figure 6: US. Relative Book to Price of the high yielders



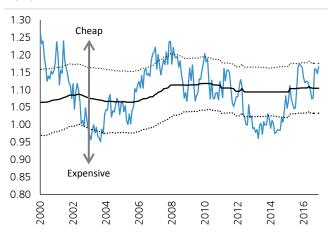
Source: UBS Quantitative Research. The horizontal lines correspond to the 10 yr rolling median and median plus or minus one standard deviation.

Figure 8: Japan. Relative Book to Price of the high yielders



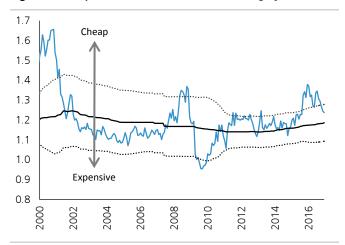
Source: UBS Quantitative Research. The horizontal lines correspond to the 10 yr rolling median and median plus or minus one standard deviation.

Figure 10: Asia Pacific ex. Japan. Relative Book to Price of the high yielders



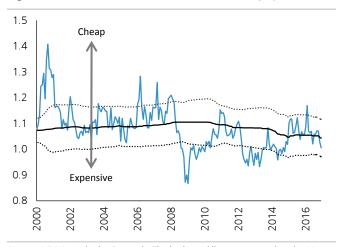
Source: UBS Quantitative Research. The horizontal lines correspond to the 10 yr rolling median and median plus or minus one standard deviation.

Figure 7: Europe. Relative Book to Price of the high yielders



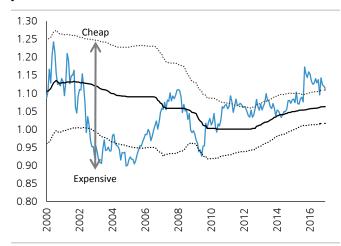
Source: UBS Quantitative Research. The horizontal lines correspond to the 10 yr rolling median and median plus or minus one standard deviation.

Figure 9: Canada. Relative Book to Price of the high yielders



Source: UBS Quantitative Research. The horizontal lines correspond to the 10 yr rolling median and median plus or minus one standard deviation.

Figure 11: Emerging Markets. Relative Book to Price of the high yielders



and Source: UBS Quantitative Research. The horizontal lines correspond to the 10 yr rolling median and median plus or minus one standard deviation.

How do we identify 'high quality' dividend payers?

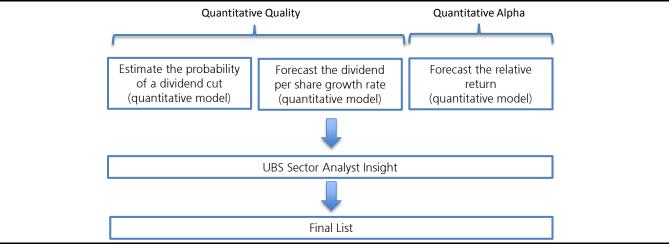
There are two parts to our process. We start with a rigorous quantitative assessment of each company using machine learning algorithms. We want stocks with a high quality dividend stream, as well as the earnings power and balance sheet to support it. We also quantitatively assess the potential for the name to outperform its sector.

Rigorous quantitative process

Next, we submit the best-scoring companies to the scrutiny of our fundamental analysts, who can reflect on more subjective factors (like management quality and investor sentiment) and provide forward-looking perspective. Throughout the process, we emphasise the stability and growth potential of dividend streams, as opposed to the current yield.

The scrutiny and judgment of our fundamental analysts

Figure 12: A fundamental and quantitative selection process



Source: UBS Quantitative Research

Finally, stocks that satisfy both quantitative and fundamental criteria are flagged to an algorithm that allocates to the best stocks, taking the regional and sector composition of global equity markets into consideration. The goal of this last step is to ensure that the list as a whole provides a diverse source of dividend income and total return, both regionally and sector-wise.

The list allocates to regions and sectors based on their weights in global equity markets

Appendix

Deriving the list

To derive the list we follow the 5 steps highlighted below.

(1) We select all the companies with a trailing dividend yield that is higher than the median dividend yield in their sector and region.¹

We compute company-specific scores based on their estimated probability of a dividend cut (next 12 months), their forecast dividend per share growth rate (next 12 months) and their expected relative returns (next 3 months).

The forecasts are derived from quantitative machine learning based models (Random Forests ensembles). The 17 key variables used to forecast the dividend cut probabilities and the dividend growth rates are listed in Figure 13 on page 8. Figure 14 on page 8 lists the 16 inputs used to forecast the relative returns.

More details can be found in <u>Quantitative Monograph: Safe dividends in times of financial repression.</u>²

(2) The scores are combined to derive an aggregate measure (quantitative composite score, the 3 underlying scores are weighted equally).

Please note that both the estimated probability of a dividend cut and the 12 months forecast dividend per share growth rates are built with an emphasis on downside risk. As such, the *combined score is primarily a quality metric*.

- (3) In each sector and region we rank all the companies that are rated 'Buy' by UBS Fundamental Research based on their composite quantitative scores. The best ranking companies are submitted to our fundamental analysts for further investigation.
- (4) The companies that fail the fundamental review are excluded. Out of the remaining companies we select approximately 50 companies with the highest quantitative scores in their region and sector (the number of companies to select in each sector and region is determined based on the weights observed in global equity markets).

The following two figures list all the inputs used in the quantitative models.

More details can be found in the Quantitative Monograph: "Safe dividends in times of financial repression" available by <u>clicking here</u>. Please feel free to contact to discuss the quantitative process in more details.

We select high dividend yielding companies

We estimate the probability of dividend cuts, the dividend per share growth rates and the potential to outperform using machine learning

Each company receives a composite quantitative score

We select companies to submit for review of our fundamental analysts

¹ We use the 10 GICS sectors and assign companies to 6 global regions (US, Canada, Europe, Japan, Asia Pacific ex. Japan and Emerging Markets).

² Please contact us if you would like to discuss the quantitative process in more details.

Figure 13: The 17 key variables used to forecast the likelihood of a dividend cut and the dividend per share growth rates

Category	Factor	Economic reason for inclusion
Dividend related	Trailing dividend yield	A high dividend yield can signal that the dividend is unsustainable
Dividend related	Forecast dividend yield	A high dividend yield can signal that the dividend is unsustainable
Dividend related	Dividend Earnings Cover	The earnings cover (pay-out) is a measure of the dividend's sustainability
Dividend related	Dividend growth (1 year trailing)	Companies that grow their dividends are less likely to cut them later on
Dividend related	Dividend growth (12 months forecast)	Companies that grow their dividends are less likely to cut them later on
Market driven	Price Momentum (12-1-1)	A strong price momentum signals that the company is doing well (also from a fundamental perspective)
Market driven	Volatility (previous 6 months)	Bad news and volatility are correlated
Market driven	12 month change in volatility	Bad news and increases in volatility are correlated
Earnings related	Earnings growth (1 year trailing)	Earnings growth affects the ability to pay the dividend
Earnings related	Earnings growth (12 months forecast)	Earnings growth affects the ability to pay the dividend
Earnings related	Earnings revisions (3M)	Earnings revisions pre-empt future earnings growth and reflect market sentiment
Earnings related	Coefficient of variation of forecast EPS	The measure captures uncertainty about future earnings
Quality	Book to price	A high book to price is a sign of distress
Quality	Debt to Enterprise Value	High levels of debt reduce the cash available to pay dividends and pre-empt further debt increases
Quality	Cash to Total Assets	Low levels of cash are a sign of distress
Quality	ROIC	Non profitable companies are forced to cut dividends
Quality	ROE	Non profitable companies are forced to cut dividends

Source: UBS Quantitative Research

Figure 14: The 16 key variables used to forecast the relative returns

Category	Sub-category	Factor name
Value	Book value yield	Book to price ratio
Value	Cash Flow yield	Free cash flow yield (after dividend payments)
Value	Dividend	Dividend yield (trailing)
Value	Earnings yield	Earnings yield (12M)
Value	Earnings yield	Earnings yield (trailing)
Growth	Earnings growth	Earnings growth (12M)
Growth	Earnings growth	Earnings growth (trailing 1 year)
Momentum	Earnings momentum	Earnings revisions (3M)
Momentum	Price momentum	Price momentum (12-1)
Quality	Dividend quality	Dividend Earnings Cover
Quality	Leverage	Debt to EV
Quality	Profitability	Net profit margin
Quality	Profitability	Return on Invested Capital
Risk	Market risk	Exponential volatility (short-term signal)
Risk	Market risk	Volatility 12 months (long-term signal)

Source: UBS Quantitative Research

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Investing in global equities poses currency, country, industry, and company-specific risks. Valuations can be impacted by company-specific factors, investor risk appetite, as well as changes in the macroeconomic landscape and financial market stability.

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Buy	FSR is > 6% above the MRA.	45%	28%
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Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 30 September 2016.

- 1:Percentage of companies under coverage globally within the 12-month rating category.
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AbbVie ^{7, 16b}	ABBV.N	Buy	N/A	US\$62.73 2	9 Dec 2016
Admiral Group ^{5, 14}	ADML.L	Buy	N/A	1,812p 2	9 Dec 2016
American Tower Corporation ^{16b}	AMT.N	Buy	N/A	US\$106.39 2	9 Dec 2016
Anta Sports Products	2020.HK	Buy	N/A	HK\$22.65 2	9 Dec 2016
Apple Inc.6c, 7, 16b	AAPL.O	Buy	N/A	US\$116.73 2	9 Dec 2016
Astellas Pharma ⁵	4503.T	Buy	N/A	¥1,603.5 2	9 Dec 2016
Capgemini	CAPP.PA	Buy	N/A	€80.71 2	9 Dec 2016
Chubb Limited ^{4, 5, 6a, 6b, 7, 16b}	CB.N	Buy	N/A	US\$132.24 2	9 Dec 2016
Cisco Systems Inc. ^{4, 6a, 6b, 7, 16b}	CSCO.O	Buy	N/A	US\$30.46 2	9 Dec 2016
CK Hutchison Holdings ^{5, 7, 16a}	0001.HK	Buy	N/A	HK\$87.90 2	9 Dec 2016
Coca-Cola ^{6c, 7, 16b}	KO.N	Buy	N/A	US\$41.60 2	9 Dec 2016
Eastman Chemical 16b	EMN.N	Buy	N/A	US\$75.52 2	9 Dec 2016
Edison International ^{7, 16b}	EIX.N	Buy	N/A	US\$72.28 2	9 Dec 2016
Gilead Sciences ^{16b, 18a}	GILD.O	Buy	N/A	US\$72.13 2	9 Dec 2016
Home Depot Inc. ^{16b}	HD.N	Buy	N/A	US\$135.10 2	9 Dec 2016
Imperial Brands	IMB.L	Buy	N/A	3,549p 2	9 Dec 2016
Intact Financial Corporation ^{6b, 7}	IFC.TO	Buy	N/A	C\$96.33 2	9 Dec 2016
Japan Tobacco ⁷	2914.T	Buy	N/A	¥3,854 2	9 Dec 2016
Largan Precision	3008.TW	Buy	N/A	NT\$3,725.00 2	9 Dec 2016
Lowe's Companies, Inc. 16b	LOW.N	Buy	N/A	US\$71.34 2	9 Dec 2016
LVMH Moet Hennessy Louis Vuitton SA ⁷	LVMH.PA	Buy	N/A	€179.40 2	9 Dec 2016
Marsh & McLennan Companies, Inc. ^{13, 16b}	MMC.N	Buy	N/A	US\$67.75 2	9 Dec 2016
Medtronic PLC ^{6a, 6b, 6c, 7, 16b, 18b}	MDT.N	Buy	N/A	US\$71.54 2	9 Dec 2016
Microsoft Corp. 4, 6a, 6b, 6c, 7, 16b, 22	MSFT.O	Buy	N/A	US\$62.90 2	9 Dec 2016
Mondi ^{14, 18f}	MNDI.L	Buy	N/A	1,665p 2	9 Dec 2016
Morgan Stanley ^{4, 5, 6b, 6c, 7, 16b, 22}	MS.N	Buy	N/A	US\$42.15 2	9 Dec 2016
MTS ^{16b}	MBT.N	Buy	N/A	US\$9.13 2	9 Dec 2016
Nasdaq, Inc. 6b, 7, 12, 16b	NDAQ.O	Buy	N/A	US\$67.01 2	9 Dec 2016
Nine Dragons Paper	2689.HK	Buy	N/A	HK\$6.97 2	9 Dec 2016
Park24	4666.T	Buy	N/A	¥3,140 2	9 Dec 2016
Pentair Plc ^{16b, 18c}	PNR.N	Buy	N/A	US\$56.51 2	9 Dec 2016
Pfizer Inc. ^{6b, 7, 16b, 18d}	PFE.N	Buy	N/A	US\$32.49 2	9 Dec 2016
Reckitt Benckiser ^{4, 5}	RB.L	Buy	N/A	6,860p 2	9 Dec 2016
Resmed ^{16b}	RMD.N	Buy	N/A	US\$62.44 3	0 Dec 2016
Royal Caribbean ^{16b}	RCL.N	Buy	N/A	US\$82.96 2	9 Dec 2016
Schroders plc ⁷	SDR.L	Buy	N/A	2,981p 2	9 Dec 2016
Sekisui House	1928.T	Buy	N/A	¥1,946.0 2	9 Dec 2016
Sempra Energy ^{2, 4, 6a, 6c, 7, 16b, 18e}	SRE.N	Buy	N/A	US\$100.99 2	9 Dec 2016
T. Rowe Price Group ^{6b, 6c, 7, 16b}	TROW.O	Buy	N/A	US\$75.54 2	9 Dec 2016
Taiwan Semiconductor Manufacturing ^{16b}	2330.TW	Buy	N/A	NT\$180.00 2	9 Dec 2016
Texas Instruments Inc. ^{16b}	TXN.O	Buy	N/A	US\$74.15 2	9 Dec 2016

Company Name	Reuters	12-month rating S	hort-term rating	Price	Price date
Transurban ^{2, 4, 5, 7}	TCL.AX	Buy	N/A	A\$10.32	30 Dec 2016
Valeo	VLOF.PA	Buy	N/A	€54.09	29 Dec 2016
Vopak	VOPA.AS	Buy	N/A	€45.31	29 Dec 2016
XL Group plc16b	XL.N	Buy	N/A	US\$37.26	29 Dec 2016

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