

Research Institute

Thought leadership from Credit Suisse Research and the world's foremost experts



Introduction

Family-owned businesses are among the most important building blocks of a nation's economy and have gradually come under the radar of leading experts and academics. From small and mid-sized organizations to multinational corporations, family-run businesses set high performance standards and bear lessons to be learned for the broader business community. In this extended update of our 2015 Family Business Report, we explore the key factors behind family-business decision-making and ultimately their long-term success.

In both mature and emerging countries, family-owned businesses make a substantial contribution to economic development and represent a core fundament of long-term, sustainable growth. The top league of these businesses is known worldwide, among them BMW, Nike, Roche, Tata Group or Walmart. However, most observers are likely to underestimate just how successful many of the less publicly known family businesses have been over the past decades.

In our 2015 family-business-focused report, we established that family-owned companies outperform equity-markets across the globe. On a sector-adjusted basis, this outperformance equaled an annual average of 4.5% between 2006 and 2015. This year, we have taken an even closer look at these impressively performing businesses and expanded the sample by 10% to nearly 1,000 companies. Our detailed and extended update confirms our past results: since 2006, the companies evaluated have generated a cumulative return of 126%, which equals

an outperformance of the MSCI AC World Index by 55%. More precisely, family-owned businesses have outperformed non-family-owned companies in every region and in every sector assessed. Geographically, Europe shows the strongest annual-average sectoradjusted outperformance at 5.1%.

Having confirmed a superior business performance of family-run companies across sectors and geographies throughout the past decade, our interest turned to the underlying reasons. Following a comprehensive analysis, we came to conclude that conservative growth targets combined with organic cash-flow or equity investments are among the key performance drivers and tend to produce sizeable, sustainable returns. Furthermore, the family-owned businesses in our assessment pay specific attention to capital preservation, while at the same time especially in the USA and Asia - they invest more in research and development than their non-familyowned peers. In fact, especially in Asia (excluding Japan), family-owned businesses have tripled their research and development investment in the past four years.

We hope that you find our findings valuable and wish you an insightful, enjoyable read.

Urs Rohner Chairman of the Board of Directors Credit Suisse Group AG









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Authors

Eugene Klerk Maria Bhatti Richard Kersley Brandon Vair

Contributors

Akanksha Kharbanda Amit Phillips

For more information, contact: Richard Kersley, Head Global Thematic Research, Credit Suisse Investment Banking, richard.kersley@credit-suisse.com, or

Michael O'Sullivan, Chief Investment Officer, International Wealth Management, Credit Suisse, michael.o'sullivan@credit-suisse.com

The CS Family 1000

In this report, the Credit Suisse Research Institute extends its assessment of family-owned businesses by analyzing financial and share-price performance on a regional, sector and size basis, as well as on a global level. To test our findings and conclusions, we have performed comprehensive interviews with over 100 family-owned companies across ten countries. While multiple factors play a role when it comes to company performance, we establish a positive correlation with family ownership.

Family-owned companies outperform non-family-owned peers...

Since early 2006, our "Family 1000" universe* has outperformed broader equity markets by an annual average of around 400 basis points (bp) per year. We define family-owned companies as follows: (1) direct shareholding by founders or descendants of at least 20%, (2) voting rights held by founders or descendants of at least 20%. We have found that, family-owned companies outperformed in every region (annual excess returns ranged from 310 bp in non-Japan Asia to 510 bp in Europe) and in every sector.

...supported by superior growth and profitability

The financial performance of family-owned companies is superior to that of non-family-owned businesses across the globe. Revenue and EBITDA growth is stronger, EBITDA margins are higher, cash flow returns are better (14% relative to non-family-owned) and momentum in gearing is more moderate.

Family-owned companies also appear to have a greater focus on innovation as research and development (R&D) spending is higher. Funding for R&D is made easier as family-owned companies have lower pay-out ratios. Reviewing growth and cash flow returns by sector and size (small versus large-caps) suggest that the "family factor" is largely universal.

Family-owned companies have a longer-term and conservative focus

We have conducted a proprietary survey of over 100 family-owned companies across ten countries focused on strategy, growth expectations and key characteristics of family-owned companies. The survey showed a strong preference by family-owned companies for conservative growth with new investments largely financed through organic cash flows or equity. Over 90% of the companies

interviewed believe they have greater focus on quality long-term growth than non-family-owned peers. The propensity to use long-term financial parameters as targets for management remuneration also increases with the family/founder shareholding.

Corporate governance slightly weaker, but does it matter?

We have assessed corporate governance credentials of family-owned companies by applying the proprietary performance based incentive scorecard as developed by HOLT®. This assessment suggests that family-owned companies score slightly lower than non-family-owned companies when it comes to corporate governance standards. While a strong corporate governance structure can help identify whether a firm is correctly incentivizing its management, it is not the only mechanism through which companies can generate superior cash flow returns.

Succession risk may be overstated

Our analysis shows that first and second generation family-owned companies generated higher risk-adjusted returns than older peers over the past ten years. While some might believe that this is due to succession-related challenges, we would caution against this. First, we show that younger family-owned companies tend to be small-cap growth stocks, which has been a strong performing style and, second, family-owned companies themselves do not see succession planning as one of their key concerns at all.

Who are the family-owned companies?

Тор	Top 50 companies by market cap.			Top 50 companies by revenue growth				Top 50 companies by share-price returns			
	Company	Mkt. cap. (USD bn)		Company	Avg. rev. growth*	Mkt. cap. (USD bn)		Company	Avg. share price returns*	Mkt. cap. (USD bn)	
1	Alphabet	651	1	Opko Health	141%	4	1	China Evergrande	109%	51	
2	Facebook	500	2	Holitech Technology	115%	5	2	Geely Automobile Hdg.	99%	28	
3	Alibaba Group	456	3	Kaile Science & Tech. Hubei	95%	3	3	Hanmi Science	89%	5	
4	Samsung Electronics	303	4	Ck Hutchison Holdings	85%	50	4	Bajaj Finance	89%	17	
5	Berkshire Hathaway	245	5	Nanjing Xinjiekou Dpste.	69%	7	5	Sunac China Holdings	84%	19	
6	Wal Mart Stores	240	6	Altice A	61%	33	6	Hengtong Optic-Electric	70%	6	
7	Anheuser-Busch Inbev	235	7	Geely Automobile	58%	28	7	Bajaj Finserv	70%	14	
8	Oracle	200	8	Berli Jucker	53%	6	8	Hanmi Pharm	69%	4	
9	Comcast	198	9	Hubei Biocause Pharm.	52%	6	9	Nanjing Xinjiekou Dpste.	67%	7	
10	Roche Holding	179	10	Tesla	47%	62	10	Country Garden Holdings	65%	39	
11	Toyota Motor	176	11	Jd.Com	47%	65	11	Kingboard Laminates Hdg.	64%	5	
12	Lvmh	139	12	Facebook Class	47%	500	12	Kingston Financial Group	56%	6	
13	Sap	134	13	Zhongtian	47%	5	13	Scien.Games	51%	4	
14	Inditex	120	14	China Evergrande	45%	51	14	Gp Finance Galicia	49%	7	
15	L'Oreal	119		Alibaba Group		456				3	
16	Reynolds American	93	15		44%		15	Dewan Housing Finance	48%		
17	Softbank Group	90	16	Oriental Energy	42%	3	16	Seria	45%	4	
18	Nike	88	17	Molson Coors Brewing	39%	16	17	Aac Technologies Hdg.	45%	22	
			18	Natco Pharma	39%	2	18	Yes Bank	45%	13	
19	Reliance Industries	83	19	Tpg Telecom	37%	4	19	Zhej.Wanfeng Auto Wheel	44%	6	
20	Baidu	82	20	Hengtong Optic-Electric	36%	6	20	Britannia Inds.	44%	8	
21	Tata Consultancy Svs.	74	21	Country Garden Holdings	35%	39	21	Telesites B-1	44%	2	
22	Jd.Com	65	22	Gp Finance Galicia	34%	7	22	Kose	43%	7	
23	Tesla	62	23	Fibra Danhos Reit	34%	2	23	T V S Motor	42%	5	
24	Bmw	61	24	Bajaj Finance	34%	17	24	Kaile Science And Tech. Hubei	42%	3	
25	Heineken	58	25	Pik Group	34%	4	25	Zhejiang Supor	42%	5	
26	Christian Dior	57	26	Aac Technologies Hdg.	33%	22	26	Ashok Leyland	42%	5	
27	Henkel Pref.	56	27	Exor Ord	32%	16	27	Fangda Special Stl.Tech.	41%	3	
28	Enterprise Prds	56	28	Reliance Capital	32%	3	28	Nine Dragons Paper Hdg.	41%	10	
29	Ford Motor	56	29	Genting Hong Kong	32%	2	29	lpsen	41%	12	
30	Hermes Intl.	53	30	Arca Continental	31%	12	30	Straumann Hldg.	41%	10	
31	China Evergrande	51	31	Yes Bank	30%	13	31	Raia Drogasil On	41%	8	
32	Las Vegas Sands	50	32	Fujian Newland Computer	30%	3	32	Minth Group	39%	6	
33	Simon Property Group	50	33	Kotak Mahindra Bank	30%	30	33	Shenzhou Intl.Gp.Hdg.	39%	12	
34	Kering	50	34	Yanlord Land Group	29%	3	34	Hanergy Thin Film Power Group	39%	21	
35	Ck Hutchison Holdings	50	35	Eurofins Scientific	28%	11	35	Eicher Motors	38%	14	
36	Jardine Strategic Hdg.	49	36	Regeneron Pharms.	27%	47	36	Jiangsu Hengrui Medicine	37%	25	
37	Sun Hung Kai Properties	49	37	China Med.Sy.Hdg	26%	4	37	Long Yuan Construction Gp.	37%	2	
38	Regeneron Pharms.	47	38	Corp Moctezuma	26%	4	38	Sinar Mas Multiartha	37%	5	
39	Carnival	47	39	Sun Pharm.Industries	26%	19	39	Partners Group Holding	37%	18	
40	Richemont N	46									
41	Jardine Matheson Hdg.	46	40	Azrieli Group	26%	7	40	Eurofins Scientific	36%	11	
42	Fresenius	45	41	Aurobindo Pharma	26%	7	41	Man Wah Holdings	35%	4	
	America Movil		42	Zhejiang Huahai Pharm.	26%	3	42	Natco Pharma	35%	2	
43		41	43	Zhej.Wanfeng Auto Wheel	25%	6	43	Agile Group Hdg.	35%	6	
44	Estee Lauder	41	44	Meidu Energy	25%	3	44	Hubei Biocause Pharm.	35%	6	
45	Hennes & Mauritz	40	45	Alsea De Cv	25%	3	45	Kangmei Pharm.	34%	15	
46	Country Garden Holdings	39	46	Ashok Leyland	25%	5	46	Smith (Ao)	34%	10	
47	A P Moller - Maersk	38	47	Redrow	24%	3	47	Lee & Man Paper Mnfg.	34%	6	
48	Lafargeholcim	37	48	Lithia Motors	24%	3	48	Biomerieux	33%	10	
49	Pernod-Ricard	36	49	Press Metal	24%	3	49	Holitech Technology	33%	5	
50	Bank Central Asia	35	50	Dewan Housing Finance	24%	3	50	Kaz Minerals	32%	4	

Source: Datastream, Credit Suisse Research; Annual average revenue growth and share-price returns for 2014–2017; USD 2 bn market cap threshold.

Family-owned company defined as (1) direct shareholding by founders or descendants of at least 20%; (2) voting rights held by founders or descendants of at least 20%.

Family-owned companies as an asset class

Our assessment suggests that the investment case for family-owned companies remains compelling as they have outperformed non-family-owned companies globally by around 400 basis points per year since 2006. Importantly, this impressive performance occurred in every region and sector of our analysis. While younger family-owned companies outperformed their more mature peers, we do not necessarily see this as proof of "succession risk," but more likely a reflection of the more small-cap growth profile of younger family-owned companies. The degree of share ownership by the founder or family does not appear to be a key driver for performance.

The family-owned 1,000 database

In order to deepen our understanding of the family-owned factor, we revisited our 2015 database of around 900 family-owned companies with the aim to expand the included family-owned companies. The criteria we use to define a company as "family-owned" are:

- Direct shareholding by founders or descendants of at least 20%.
- Voting rights held by founders or descendants of at least 20%.

Our review of the database has allowed us to increase the number of family-owned companies globally to almost 1,000 (i.e. "The CS Family 1,000 database"). The majority of companies included in our database are located in emerging markets (EMs), with Asia alone contributing 536 or 56% of the total (see Figure 1).

Europe and the USA, on the other hand, are represented by "just" 311 companies combined. At USD 6.9 billion, we note that the average size of family-owned companies in Asia is substantially smaller than that of companies in Europe (USD 13 billion) and the USA (USD 21.7 billion).

On a country basis, we find that most of the family-owned companies are located in China (167), the USA (121), India (108) and France (70) (see Figure 3). However, in terms of average size, the ranking changes much more in favor of developed markets. The average market capitalization of family-owned companies is greatest in Spain (USD 30 billion), the Netherlands (USD 30 billion), Japan (USD 24 billion) and Switzerland (USD 22 billion) (see Figure 4).

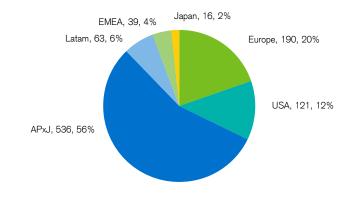
In our view, the reasons why publicly listed family-owned companies appear more frequently in emerging markets might include:

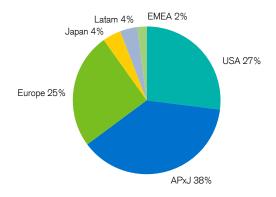
 The fact that family-owned companies across global emerging markets are much younger

Figure 1

Number of family-owned companies by region

Figure 2
Family-owned companies by regional market cap





Source: Credit Suisse Research

Source: Credit Suisse Research

than their peers in developed markets, which naturally suggests that family or founder ownership in the former is likely to be higher (see Figure 5). Family-owned companies in developed Europe were founded on average 82 years ago compared to 37 years in the case of companies in Asia (ex-Japan) and 30 years in Europe, Middle East and Africa (EMEA) (see Figure 5).

- Another factor might be that economic growth across developed markets is arguably more challenging than for emerging markets. This, combined with more mature family-owned companies, might have given their owners more reasons to lock in the value of their firms by selling down.
- Finally, we would also note that ties to family heritage might be stronger in emerging markets, thus making families less willing to dispose of their assets.

The non-family-owned control group

In order to analyze whether a "family factor" exists, our 2015 report compared the share-price returns of our overall family-owned universe on a sectoradjusted basis to the MSCI AC World index. However, for the purpose of this report, we see the MSCI AC World index, excluding the familyowned companies, as a less useful "control group." The index consists of about 1300-1500 stocks, which implies that any regional, sector and/or size comparison of family-owned companies is likely to be based on a too-small subset of the index, which reduces the significance of our conclusions.

For the purpose of this report, we therefore decided to expand our benchmark to around 8,500 companies globally, allowing for more meaningful comparisons in our view (see Figure 6).

Figure 3 Family-owned companies by country: Top 25; Asia leads

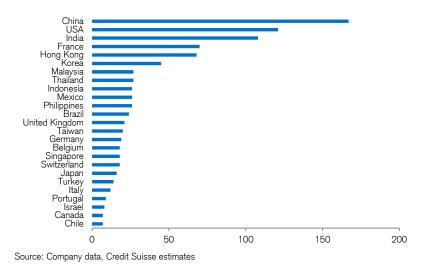


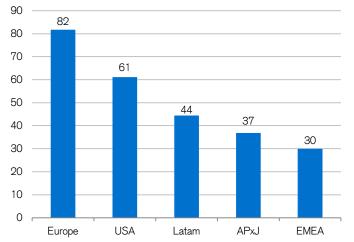
Figure 4 Average market cap (USD bn) for family-owned companies by country

Spain Netherlands Japan Switzerland USA Germany Sweden Belgium Denmark Canada Korea France Hong Kong Italy Chile Singapore Mexico United Kingdom Luxembourg India Israel Russian Federation Philippines 15 20 25 30 35

Source: Company data, Credit Suisse estimates

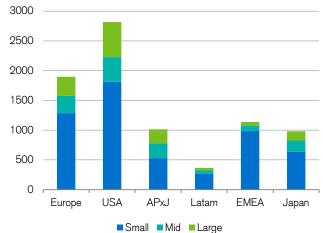
Figure 6

Figure 5 Average age of family-owned companies by region (years)



Source: Thomson Reuters Datastream, Credit Suisse

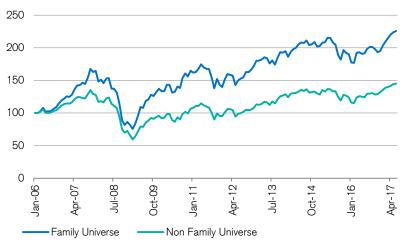
Non-family-owned universe used as control group for performance analysis



Source: Thomson Reuters Datastream, Credit Suisse

Figure 7

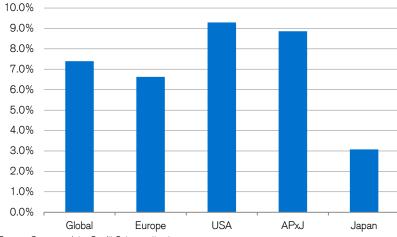
Market-cap-weighted sector-adjusted returns: Family-owned companies have outperformed since 2006



Source: Company data, Credit Suisse estimates

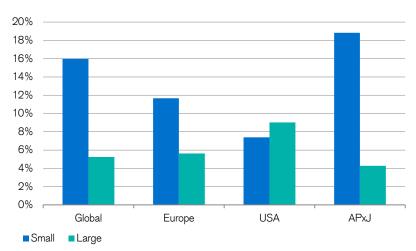
Figure 8

Annual average market-cap-weighted returns of family-owned companies by region



Source: Company data, Credit Suisse estimates

Sector-adjusted returns for small vs. large-cap family-owned companies by region



Source: Company data, Credit Suisse estimates

Family-owned companies outperform

Our 2015 report showed that family-owned companies had outperformed MSCI AC World on a sector-adjusted basis by an annual average of 4.5% during the preceding nine years. Our updated analysis shows that, on a global basis, these results hold. Since the start of 2006, our universe of family-owned companies has generated a cumulative return of 126%, thereby outperforming the MSCI AC World index by 55%. This implies an annual average "alpha" of 392 bp. The outperformance of family-owned companies to our much broader global universe of non-family-owned companies is slightly better at an annual 404 bp (see Figure 7).

Absolute "family-owned" returns by region and market cap

Using absolute returns, we find that family-owned companies in the USA and in Asia ex Japan generated the strongest market-cap adjusted returns at an annual average of 9.3% and 8.9%, respectively (see Figure 8). Comparing these regional constituents by size suggests that, on a sector-adjusted basis, small-cap family-owned companies outperformed their larger family-owned peers in almost every region except the USA (see Figure 9).

Family-owned returns relative to nonfamily-owned companies

Comparing returns of family-owned companies to non-family-owned companies by region suggests that the "family alpha" has global credentials and is apparent among small and larger companies. The annual average sector-adjusted outperformance appears strongest in Europe at 5.1% and lowest in Asia Pacific ex Japan (ApxJ) albeit at a still-healthy 3.1%.

Risk versus return: Family-owned versus non-family-owned

While share-price returns for family-owned companies appear strong relative to their respective non-family-owned peers, the question is also whether these returns have been generated with equal or even lower volatility. Figure 10 clearly shows that this is the case. Risk-adjusted returns (returns divided by their standard deviation) for family-owned companies since January 2006 have in almost all cases been superior to those of equities more broadly.

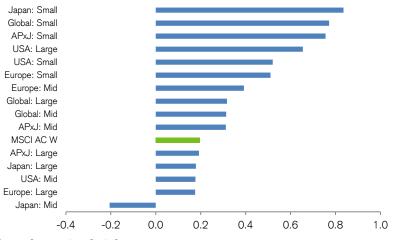
Family-owned companies outperformed in every sector

In order to assess whether the family factor is sectordriven, we have also calculated share-price returns by sector for our family-owned companies and compared these to non-family-owned companies in the same sector. These calculations suggest that, on a global basis, family-owned companies across all sectors tend to outperform their non-family-owned peers within the same sector (see Figure 11).

Sectors where family-owned companies have historically tended to generate the strongest relative returns are energy, financials and technology. Relative returns are lowest for telecoms, albeit still positive at 0.2%. When reviewing these sector returns by region and size, we find that small-cap family-owned companies tend to perform better than their non-family-owned peers for all 11 major sectors. This is especially true for non-Japan Asian companies.

Figure 10

Information ratio: Family-owned risk-adjusted returns broadly superior to global equities since January 2006



Source: Company data, Credit Suisse estimates

Figure 11

Annual average returns for family-owned companies by sector

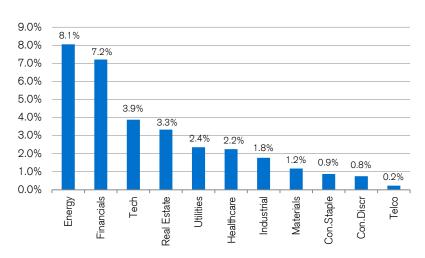
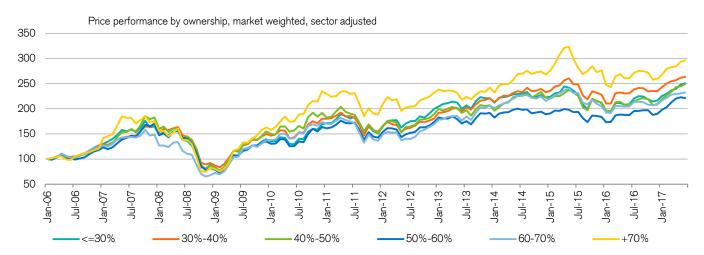




Figure 12

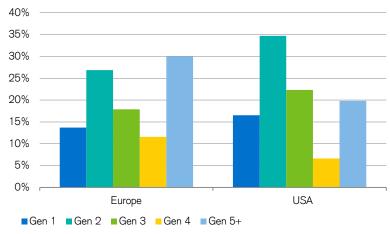
Family-owned share-price performance apparently not related to the stake that is held by the founder or his/her family



Source: Company data, Credit Suisse estimates

Figure 13

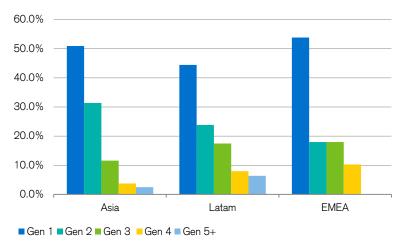
Generational ownership Europe and USA



Source: Company data, Credit Suisse estimates

Figure 14

Generational ownership: Asia and EMs



Source: Company data, Credit Suisse estimates

Degree of ownership does not seem to matter

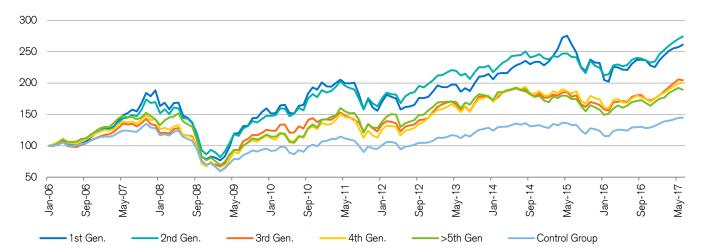
We also reviewed whether the family-owned share-price outperformance is linked to the degree of family ownership. Figure 12 shows that although the highest returns were achieved by companies with the highest family ownership (>70%) we do not believe that a straightforward relationship between these two variables can be identified. It appears to us that the notion of family control through "day-to-day" or board membership involvement might be more relevant than the percentage held in the company by the founder or his/her family.

Returns of young versus older familyowned companies

A concern of significant importance to family businesses is succession planning, not least owing to the relevance and involvement of founders and their families in the running of their companies. This includes decisions relating to whether ownership should be passed to existing family members in order to preserve the family legacy or in fact to non-family members, which may be in the best interest of the business itself. At the forefront of investor concerns is when a business passes through different generations, whether or not this will have an impact on the value of the company and its wealth-generating ability as commitment to the business reduces as it passes from the founder.

In our analysis, we assume each generation lasts approximately 25 years. Of our current family-owned database, more than 70% are in their first or second generation. The number of companies in their fourth, fifth or older generation is less than 20% of the current number of first generation family-owned companies. From a regional perspective, we find that family-owned companies in Europe and the USA

Figure 15 Price performance by generation (market-weighted, sector-adjusted)



Source: Company data, Credit Suisse estimates

tend to be much more mature compared to peers in Asia, Latam or EMEA (see Figures 13 and 14), This is likely to be a reflection of the differing stages of overall development between these regions, in our view.

Age and share-price performance

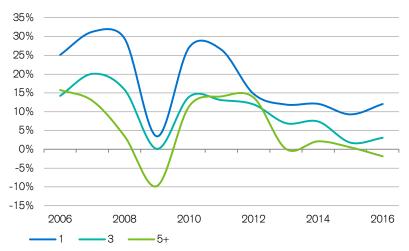
When calculating share-price performance by generation, we find clear evidence that younger family-owned companies (first or second generation) tend to perform much better than older firms (see Figure 15). What is interesting is the drop in returns as companies move into the third generation of ownership or beyond. Whereas the first two generations tend to generate share-price returns of around 9% per annum, this drops to less than 6.5% for older generations.

Some might see this drop in returns as evidence of succession risk or that control and management of the company tends to be handed over to individuals that might make "less of a difference." However, our analysis suggests it is less straight-forward and that other factors might also explain this drop in performance by "older" family-owned companies.

For example, older generation family-owned companies are more established and therefore do not offer the same high growth as younger firms (see Figure 16). Furthermore, younger family-owned companies are on average smaller than older more established firms. Therefore, the alpha seen since 2006 between younger and older firms might simply reflect a "small-cap growth" factor rather than a family-related factor (see Figure 17).

Handing over the running of a company is a risk for any company, not just those that are familyowned. While we cannot ignore succession risk for family-owned companies, we do highlight that other factors might also explain why younger family-owned companies generated the strongest share-price returns over the past ten years.

Figure 16 Revenue growth by generation



Source: Company data, Credit Suisse estimates

Figure 17 Average market cap by generation (USD bn)

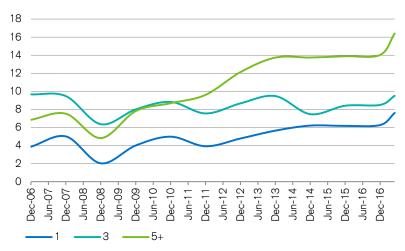
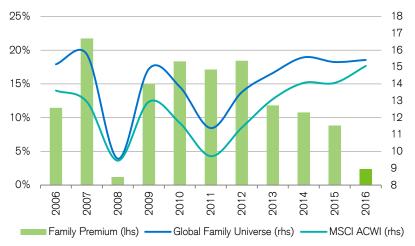


Figure 18

Price-earnings ratio based on 12-month forward earnings estimates: The family premium has all but disappeared



Source: Company data, Credit Suisse

Figure 19

EV/EBITDA ratio based on 12-month forward estimates: The family

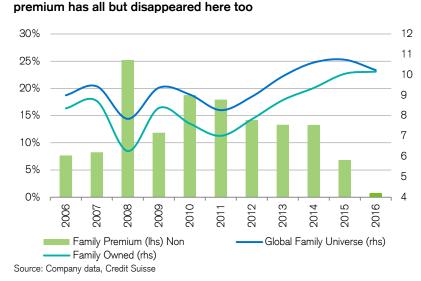
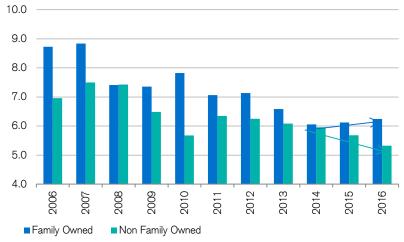


Figure 20

Cash flow returns for family-owned companies are superior to non-family-owned companies



Source: Credit Suisse HOLT®

Valuation, style and family-owned companies

As we explore later, the relative financial performance of family-owned companies supports their relative share-price returns seen since 2006 in our view. In order to see whether there is also valuation support for family-owned companies, we have used traditional valuation analysis, but also applied the HOLT® valuation framework, which uses a discounted cash flow approach.

The family-owned premium has all but disappeared

Traditional valuation multiples such as 12-month forward price/earnings show that family-owned companies trade on a premium relative to their own history, with absolute P/E above average. However, in comparison to non-family-owned companies, they appear relatively cheap and we find that they now trade at just a 2% premium versus a 10-year average of 12% (see Figure 18). Using an EV/EBITDA approach provides a similar picture. Family-owned companies trade at a historical premium, but their premium to non-family-owned companies has shrunk to a 10-year low (see Figure 19).

HOLT® valuation for family versus non-family-owned companies

In addition to traditional multiple-based valuation models, we have also reviewed the valuation of family-owned companies using a discounted cash flow approach. Here we use our internal HOLT system, which values a company's cash flow returns on investment. The cash flow return on investment premium (CFROI®) for family-owned companies relative to non-family-owned has been on average 14% since 2006 (see Figure 20). Whether or not a company is overvalued can be assessed by determining how likely it is that it can achieve the cash flow return on investment that is implied by the current share price.

HOLT defines this as a company's conditional probability. When applied to family-owned companies, this approach suggests that, as with the P/E and EV/EBITDA approach, they are trading on a premium to fair value as the conditional probability is less than 50% (see Figure 21). Non-family-owned companies also appear to trade at a premium in North America and Europe. Applying the conditional probability concept by sector shows that autos, utilities, materials and pharmaceuticals appear undervalued (see Figure 22). Family-owned companies that are more expensive, however, appear largely concentrated in staples, transport, retail and telecoms.

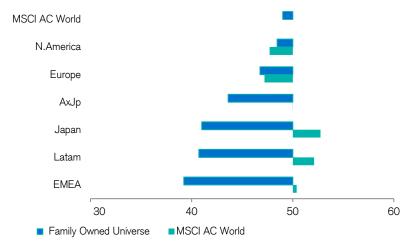
We have also reviewed the degree to which these regional sector-based family-owned valuation scores are in line with those of sectors more broadly. Figure 22 shows that, on average, this is indeed the case, suggesting that sector-specific reasons may be key in driving valuation for family-owned companies.

There are, however, a number of sectors where we observe valuation differences between family and non-family-owned companies:

- Sectors where family-owned companies are substantially cheaper than non-family-owned companies such as pharma.
- The sectors where family-owned companies are expensive relative to non-family-owned stocks include retail, telecoms, consumer durables and energy companies.

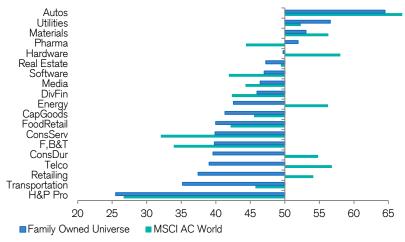
Our analysis of the share-price returns for familyowned companies clearly shows that they outperform broader markets. They may not be cheap on an absolute basis, but are more attractive relative to broader markets now than during most of the past ten years. In the next chapter, we review some of the possible reasons for the family outperformance.

Figure 21 Conditional probability by region



Source: Company data, Credit Suisse estimates

Figure 22 Conditional probability by sector: Undervalued family-owned companies tend to be in the autos, utilities, materials and pharma sectors







The family-owned business model

The financial performance of family-owned companies provides support for their strong relative share-price performance. Revenue growth of family-owned companies has been higher than for nonfamily-owned peers for each of the past ten years, EBITDA margins are higher and cash flow returns are stronger too. In addition, family-owned companies tend to focus more on future growth as below-average pay-out ratios support in-line-to-above capex intensity and above-average R&D spending.

Why do family-owned companies outperform?

The obvious question when looking at the outperformance of family-owned companies is why? Academic work as well as studies carried out by various consultancy firms typically highlight that successful family-owned companies manage to combine their view of ownership and control with a sense of direction. As a result, the commonly held opinion is that this drives family-owned companies to take a "longer-term view" toward earnings and profitability compared to non-family-owned peers.

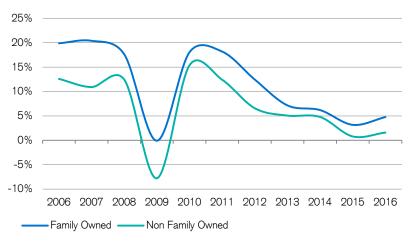
This in turn might make their growth or profitability profile more robust and allow their share prices to outperform those of non-family-owned peers. We have analyzed a range of financial metrics for the constituents of our family-owned company database and compared these with non-family-owned peers to identify whether their financial performance is indeed more robust and, if so, whether this could help explain the outperformance we have observed in the previous pages.

Family-owned companies have superior growth and cash flow returns

We first calculated revenue growth since 2006 for all family-owned companies and compared this to non-family-owned companies (see Figure 1). These calculations show a clear "alpha" generated by the family-owned universe. We would specifically highlight the following revenue growth characteristics:

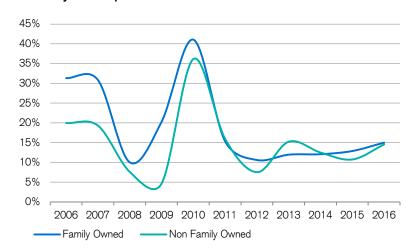
- For each of the past ten years, family-owned companies have shown stronger revenue growth than their non-family-owned peers.
- In 2009, when non-family-owned companies experienced a revenue decline of around 7%, family-owned companies still managed to grow their top lines, albeit by just 30 bp.
- Over the past two years, the family-owned companies have managed to increase their

Figure 1 Sector-adjusted revenue growth: Family-owned companies outperform non-family-owned companies



Source: Credit Suisse, Thomson Reuters Datastream

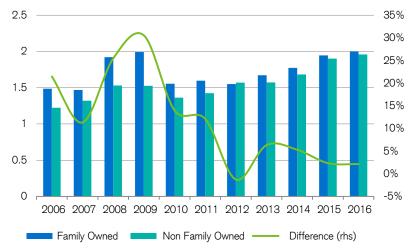
EBITDA growth: Family-owned companies tend to outperform their non-family-owned peers



Source: Credit Suisse, Thomson Reuters Datastream

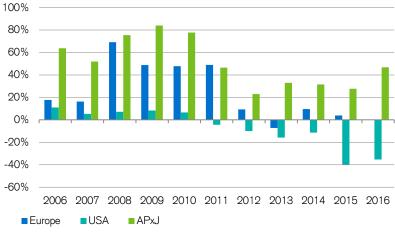
Figure 3

Net debt to EBITDA: Non-family-owned companies have been releveraging more quickly



Source: Credit Suisse, Thomson Reuters Datastream

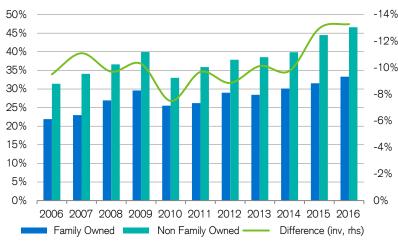
Figure 4 Net debt / EBITDA ratio: Difference between family-owned and non-family-owned companies



Source: Company data, Credit Suisse

Figure 5

Pay-out ratio comparison: Pay-out ratios of family-owned companies are around 13 points lower



Source: Company data, Credit Suisse estimates

- top-line growth differential to 370 bp in 2016 from 320 bp in 2013, and 250 bp in 2014.
- Family-owned companies generated a high risk-adjusted revenue growth (i.e. annual average revenue growth divided by the standard deviation of this growth), which might indeed be a result of taking more of a longer-term view with regard to investment decisions.
- We have also analyzed revenue growth differentials between family and non-familyowned companies on a regional basis. Generally speaking, we find that the revenue growth "alpha" is apparent across all main regions.

EBITDA growth turning more quickly

Sector-adjusted EBITDA growth calculations show that family-owned companies managed to maintain their top-line outperformance in regard to profitability. Growth during the financial crisis did fall, but, at 11% in 2008, it was still far better than the 3% generated by non-family-owned companies. The more recent EBITDA growth profile has also been stronger and more stable (Figure 2).

The ability to generate stronger and more stable revenue and EBITDA growth arguably provides a strong platform for value creation, which, relative to non-family-owned companies, does support outperformance.

Greater focus on balance sheet strength

In addition to having more robust growth metrics, we also find that family-owned companies are more conservative toward the funding of this growth.

- Since 2009, family-owned companies have reduced their gearing in terms of Net debt/ EBITDA relative to non-family-owned companies by around 20% (see Figure 3). Family-owned companies as such appear to have been less swayed by falling interest rates to fund growth than non-family-owned corporates.
- On a regional basis, we notice that familyowned companies in Asia, ex Japan have increased their gearing levels relative to nonfamily-owned companies (see Figure 4). The opposite appears true for companies in Europe, the USA. A reason for this might be that equity capital markets in Asia are not as deep or liquid, thereby forcing companies to use debt rather than equity to fund expansion.

Capital preservation is clearly a key aspect

Higher revenue and EBITDA growth together with a relatively more moderate change in gearing suggest that family-owned companies rely more on internally generated cash flows to fund their businesses than non-family-owned companies. Our database supports the notion that long-term capital preservation appears key for family-owned companies.

First, we note that the average pay-out ratio for family-owned companies is lower than that for non-family-owned corporates (see Figure 5).

Our analysis shows that these results are largely true across most regions, suggesting that this is indeed an almost global characteristic of family-owned companies.

Second, we note that family-owned companies have more stable pay-out ratios than nonfamily-owned companies. This approach is not only smooth through the cycle, but also suggests that, in downturns, family-owned companies do not have to rely as much on external funds to support dividends, which also helps to reduce gearing volatility and increase the predictability of their financial returns.

Family-owned companies seem to lead in future developments

The focus of family-owned companies on balance sheet strength does not mean that they necessarily run their businesses for cash and under-invest for future growth. In fact, our data seems to suggest that the opposite is the case in several regions. For example, capex as a share of revenues has remained comparable in recent years (see Figure 6).

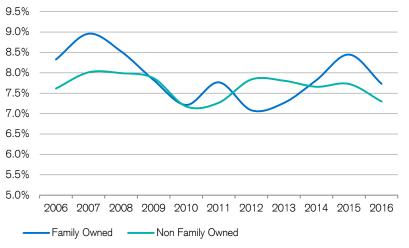
Research and development (R&D) data, however, suggest a greater focus on future growth by familyowned companies than by non-family-owned companies in Asia and the USA (see Figure 7). All else being equal, this should provide family-owned companies in these regions with a strong platform to sustain stronger revenue growth and balance sheets.

The other point worth highlighting is the rapid increase in R&D intensity of firms in Asia-ex Japan (see Figure 8). Until 2012, these firms spent less of their revenues on R&D than any other region. However, over the past four years, Asian firms have almost tripled their spending intensity on R&D, which means that they now spend almost as much as Japanese family-owned firms.

If there is one area where family-owned companies tend to under-invest in R&D relative to non-family-owned companies, it is Europe. It is the only region where for each of the past ten years family-owned companies have spent less of revenues on R&D than their non-family-owned peers.

Figure 6

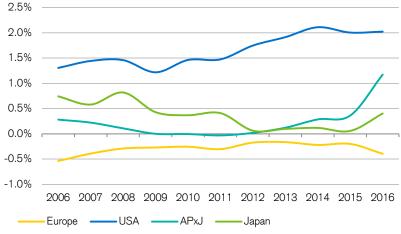
Capex as a % of revenues: Family-owned companies did not underinvest



Source: Credit Suisse, Thomson Reuters Datastream

Figure 7

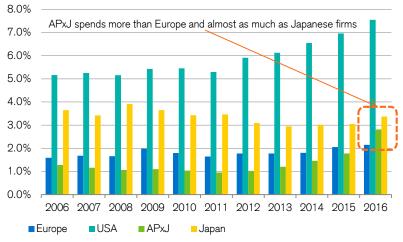
R&D spending as a % of sales: Difference between family-owned divided and non-family-owned



Source: Credit Suisse, Thomson Reuters Datastream

Figure 8

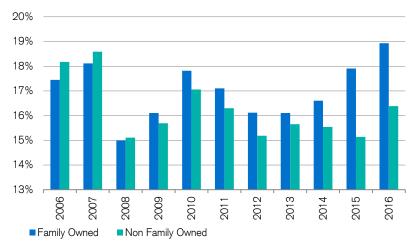
R&D spending as a % of sales by region



Source: Credit Suisse. Thomson Reuters Datastrean

Figure 9

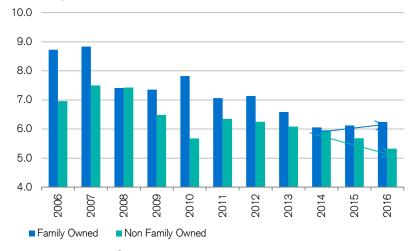
EBITDA margins for family-owned companies have recovered more than for peers



Source: Credit Suisse, Thomson Reuters Datastream

Figure 10

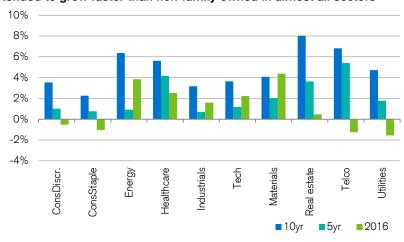
Cash flow returns for family-owned companies are superior to non-family-owned companies



Source: Credit Suisse HOLT®

Figure 11

Sales growth differential by sector: Family-owned companies have tended to grow faster than non-family-owned in almost all sectors



Source: Credit Suisse, Thomson Reuters Datastream

Margins are superior too

In addition to stronger revenue growth, we note that family-owned companies have also become superior to non-family-owned companies in terms of margin development (see Figure 9). Since 2013, we calculate that average EBITDA margins increased by almost 300 bp, putting them some 250 bp ahead of non-family-owned companies.

Superior cash flow returns

The combination of stronger growth, better margin momentum and relatively better gearing dynamics has allowed family-owned companies to also start generating higher cash flow returns than nonfamily-owned peers. Our database suggests that cash flow returns on investment (CFROI) for family-owned companies have been improving slightly since 2014, whereas the opposite is the case for nonfamily-owned companies (see Figure 10).

Last year, family-owned companies across all three key regions (USA, Europe and APxJ) produced CFROIs that were higher than those generated by their non-family-owned peers.

Growth and cash flow arguments also hold by sector

We have also compared the relative financial performance between family and non-family-owned companies on a sector basis to see whether a sector bias exists. Our calculations suggest that this is not the case.

- Higher growth: For example, sales growth for family-owned companies tends to be higher than for non-family corporates across all sectors on a 10-year and 5-year basis (Figure 11).
- More conservative pay-out: In the case of payout ratios, we find that, with the exception of consumer discretionary stocks, family-owned companies tend to retain more of their cash in all sectors.
- Gearing more of a mixed bag: As far as leverage is concerned, we find a more diverse picture when comparing family and non-familyowned companies on a sector basis. There is, however, consistency within sectors.

- Superior cash flow returns: On a global and regional basis, we previously noted that familyowned companies generated cash flow returns that were higher than those generated by non-family-owned companies. A sector-based analysis generates a similar conclusion. Figure 12 shows that, with the exception of industrials, family-owned companies in all other sectors outperform their non-family-owned peers in terms of CFROI.
- R&D intensity is rising across most sectors: Our previous analysis showed that R&D spending was rising as a share of revenues both globally and by region. Our analysis suggests that this increase is driven by most sectors (see Figure 13).

Stronger financial performance across all sizes

Finally, we assess whether the family-owned outperformance is "size dependent." In other words, does the family-owned growth and cash flow return profile change depending on the size of a company? Here we define small-cap companies as those that have a market capitalization of less than USD 3 billion, whereas large-cap companies have a market cap of more than USD 7 billion.

- As far as absolute sales growth is concerned, we find - in line with our general understanding of small caps - that smaller family-owned companies tend to outperform (albeit slightly) their larger peers (see Figure 14).
- Relative to non-family-owned peers, we find that family-owned companies generate stronger revenue growth irrespective of their market capitalization (see Figure 15). From a

Figure 12

CFROI difference between family and non-family-owned companies by

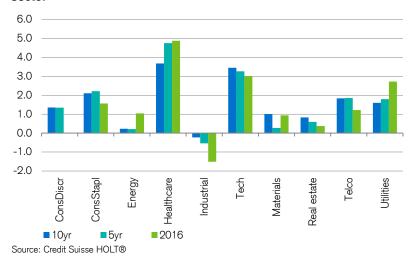
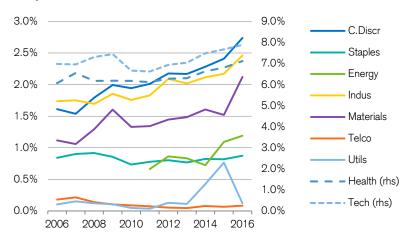


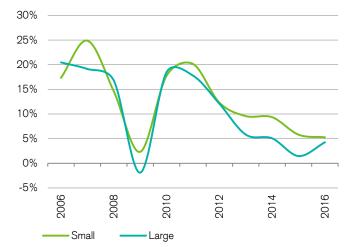
Figure 13

R&D spending as a % of revenues by sector for family-owned companies



Source: Credit Suisse, Thomson Reuters Datastream

Figure 14 Revenue growth by size



Source: Company data, Credit Suisse

Figure 15

Revenue growth: Difference between family-owned and non-family-owned companies

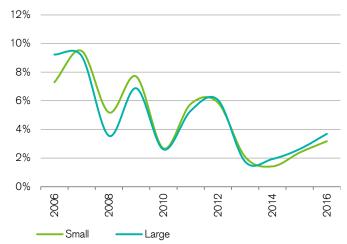
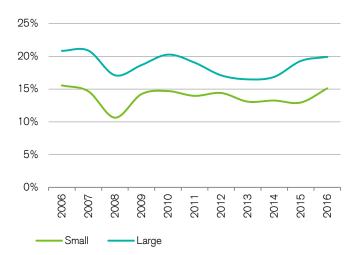


Figure 16

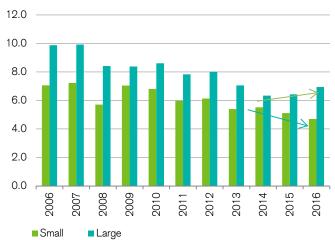
EBITDA margins for family-owned companies by size



Source: Company data, Credit Suisse

Figure 17

CFROI development by size. Large-cap family-owned companies generate higher returns (%)



Source: Company data, Credit Suisse

growth perspective, we therefore conclude that the "family factor" does not appear to be sizedependent.

- Profitability measures such as EBITDA margins show that large-cap family-owned companies are more profitable that smaller peers (see Figure 16).
- A review of cash flow returns generated by family-owned companies yields conclusions similar to our EBITDA margin analysis. Cash flow returns from larger family-owned companies tend to be higher than for smaller family-owned companies (see Figure 17).

However, as with our analysis for revenue growth, our data on CFROIs suggests that both small and large family-owned companies generate higher CFROI than their non-family peers.

Finally, we observe that pay-out dynamics for family-owned companies are broadly similar across the market-cap spectrum. In other words, pay-out ratios show a relatively stable rising trend, but are generally lower than for non-family-owned companies. In our view, this again confirms that family-owned companies on average tend to favor capital preservation and long-term value creation rather than more short-term gains irrespective of their size.





The view from a family-owned company perspective

As part of this update, we conducted an extensive survey of more than 100 of the family-owned companies included in our family database. The companies were located in Europe, the USA and Asia. The survey topics included business strategy, growth expectations and governance policies. The results suggest that family-owned companies tend to have a long-term focus when it comes to conservatively funded growth and remuneration. Succession risk does not appear a significant problem. Of greater concern are rising competition, the need to innovate and technological disruption.

What differentiates family-owned companies?

In order to help deepen our understanding of family-owned companies, we conducted a survey of more than 100 of the companies included in our Family-owned Database. The mix of family-owned companies surveyed is spread across all key regions and covers all generations from founding to fourth and beyond (see Figures 1-4). As far as size is concerned, we ensured that the family-owned companies we surveyed were spread across

small, mid- and larger sections. Finally, all of the major sectors are represented, although with a bias toward IT. financials and industrials.

In order to understand the financial performance of family-owned companies, we asked our survey companies questions related to their strategies and, more specifically, the degree of involvement by the family owners. The answers clearly indicate a strong long-term commitment from founders and family owners, suggesting a closer alliance with other shareholders with regard to longer-term value creation. We highlight the following findings:

Figure 1 Location of surveyed family-owned companies by country

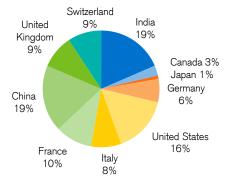
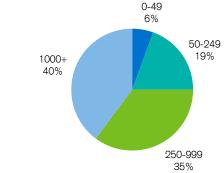


Figure 3

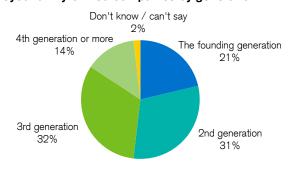
Number of employees for the surveyed family-owned companies



Source Figures 1-4: Credit Suisse

Figure 2

Surveyed family-owned companies by generation



Sector breakdown of the surveyed family-owned companies

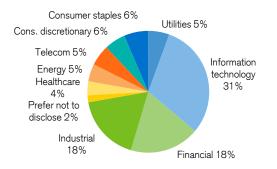


Figure 5

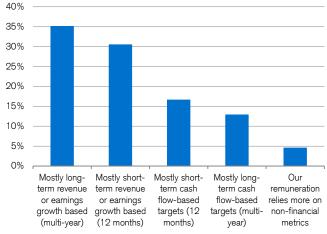
"Please signal your agreement with the following characteristics of family-owned companies relative to non-family-owned companies"



Source: Company data, Credit Suisse estimates

Figure 6

"Which key parameter is incorporated in your company's senior management remuneration program?"



Source: Company data, Credit Suisse estimates

Remuneration policies support the long-term focus, especially as family ownership increases

As part of our assessment of family-owned companies' strategies, we asked them how they remunerate their senior management. The survey clearly shows that a small majority (52%) does indeed have a focus on long-term financial or non-financial metrics (see Figure 6). Multi-year growth targets appear most popular with 35% of companies, indicating that these are the key parameter for management remuneration.

When we analyze the responses by region, we find that Asian family-owned companies have a greater focus on longer-term remuneration policies for their senior management than their peers in North America or Europe (see Figure 7). On the other hand, European family-owned companies incorporate non-

financial metrics into their remuneration policies, which is something we did not find for family-owned companies elsewhere.

One interesting aspect of our analysis is the fact that family ownership correlates with longer-term remuneration policies. Sixty-one percent of companies where the family holds a 50% or higher stake have a long-term financial or non-financial remuneration policy. This compares to just 43% of companies where the family holds a 20%–30% stake (see Figure 8).

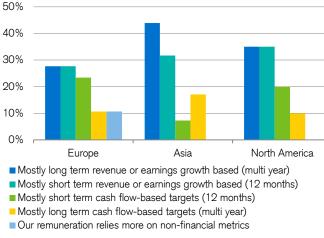
2. Family involvement is significant and consistent over time

Figure 8

Family involvement with the business is on average significant, given that almost 70% of the companies surveyed have two or more family members on their

Figure 7

Key remuneration parameters by region: Asia is more long-term-focused than the USA



Source: Company data, Credit Suisse

Key parameters adopted for senior management remuneration by family shareholding

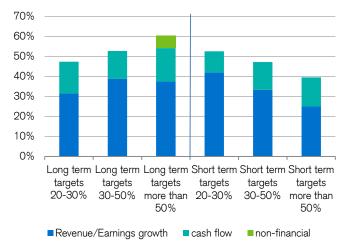
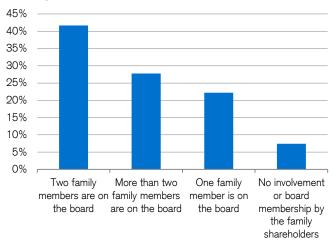


Figure 9

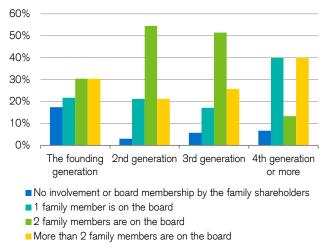
"What degree of involvement does the founding family have in your business?"



Source: Company data, Credit Suisse estimates

Figure 10

Family involvement by generation



Source: Company data, Credit Suisse estimates

boards (see Figure 9). What is interesting is that family involvement does not necessarily decline greatly as the business ages. Only 5% of the fourth generation companies surveyed indicated no family involvement or board membership by family shareholders (see Figure 10).

3. Most companies do not expect a change in family ownership

If family ownership is a positive factor for a company's financial performance, then we do not think investors need to worry greatly as only 25% of the companies surveyed expect the family ownership to decline (see Figure 11).

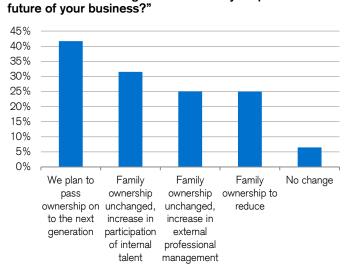
When broken down by region, we note that European family-owned companies are least likely to reduce the involvement of family shareholders

or founders. Family-owned companies in North America, on the other hand, are more likely to see a reduction in family ownership structures through secondary public offerings (see Figure 12).

4. Succession does not appear to be the biggest concern

The significant involvement of family members in the running of family-owned companies means that succession risk is typically seen as greater with family-owned companies than for non-familyowned companies. Interestingly, however, we find that family-owned companies themselves do not share this concern. Rising competition, the need to innovate and technological disruption are some of the factors that are deemed more concerning to them than succession planning (see Figure 13).

Figure 11 "Which of the following best describes your plan for the



Source: Company data, Credit Suisse

Figure 12 Regional views on future plans of family-owned

businesses 60% 40% 20% 0% Europe Asia North America ■ No change ■ Reduce family ownership ■ We plan to pass ownership on to the next generation Family ownership to be unchanged but increase in participation of internal talent

5. Revenue growth is expected to stay strong and above equity averages

When asked about their expected annual revenue growth rates, we found that a majority of the family-owned companies surveyed believe this to be 10% or more (see Figure 14). Interestingly, we note the shift toward higher revenue growth: 75% of the companies surveyed expect revenues to increase by 10% or more during each of the next three years, up from 60% last year.

While the overall result indicates a bullish outlook for family-owned revenue growth, we note that this is especially true for family-owned companies in North America, where 90% of our surveyed companies expect revenue growth of more than 10% during each of the next three years (see Figure 15). Such a top-line growth performance would clearly be above the equity market average as consensus estimates imply revenue growth for the MSCI World Index of 5.3% per annum for the next three years. Clearly what companies expect and what they ultimately achieve can be two very different things. However, premium revenue growth has been the experience to date.

6. Funding of growth through conservative channels

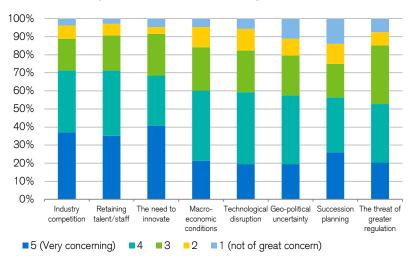
Earlier analysis in this report showed that the financial performance of family-owned companies implied a greater focus on leverage and margins. We asked the survey companies about their policies toward funding of growth, acquisitions and new investments and found that more than 45% of them preferred internally generated funds over loans, debt or issuing new equity (see Figure 16).

Interestingly, we also observe that this preference for internally generated funds remains as family-owned companies age. If anything, the share of respondents that prefer internally generated funds even increases somewhat with age (see Figure 17).

When asked to rate the importance of certain financing options available for a family business, we not only observe that retained earnings are indeed preferred over external funding. More interestingly perhaps is that, if outside financing is required, family-linked financing is preferred over every other external funding proposition (see Figure 18).

Figure 13

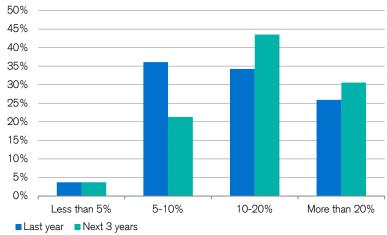
"What concerns you most over the next five years?"



Source: Company data, Credit Suisse

Figure 14

"What is your historical and expected annual revenue growth rate?" (% of respondents)



Source: Company data, Credit Suisse

Figure 15

"What is your expected annual revenue growth rate?" (% of respondents by region)

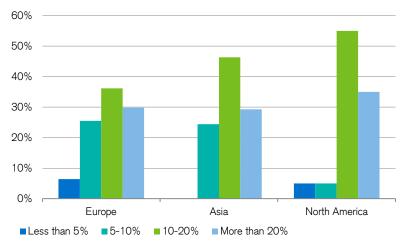
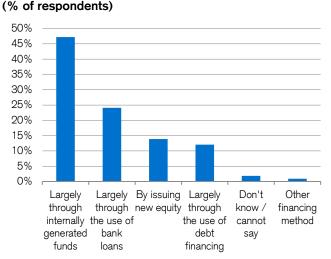
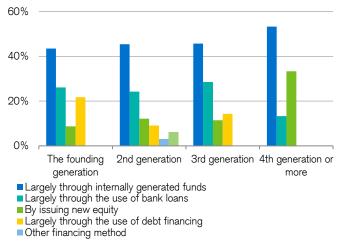


Figure 16
"How do you typically fund new investments?"



Source: Company data, Credit Suisse estimates

Figure 17
"How do you typically fund new investments?"
(% of respondents by generation)



Source: Company data, Credit Suisse estimates

7. Adoption of ESG related policies: Europe lags, Asia leads

Corporates around the world are increasingly focused on environmental policies, good corporate governance and improving their social policies. All of this has more recently received greater attention with the adoption of 17 Sustainable Development Goals by the United Nations. Against this background, we also asked family-owned companies whether they have (developed) policies aimed at environmental, social and governance (ESG)-related issues. Our survey suggests that just under 50% of family-owned companies have indeed incorporated environmentally related policies in their business strategies. On

average, we find that European companies have been slower to adopt ESG related policies, especially compared to family-owned companies in Asia (see Figure 19).

We also reviewed whether the adoption rate of ESG policies is related to where the company is in its lifecycle. Internally focused policies such as those with a social or governance angle appear uncorrelated to a company's age. With regard to the adoption rate of environmentally related policies, we find that this rate increases from generation to generation. Some 60% of fourth generation family-owned companies have adopted these policies compared to just 43% of family-owned companies that are still in their first generation.

Figure 18

"Rate the following financing options from 1 (=most) to 6 (=least)"

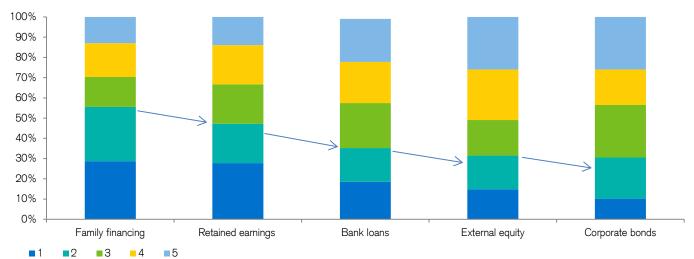
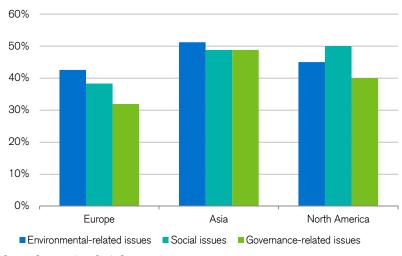
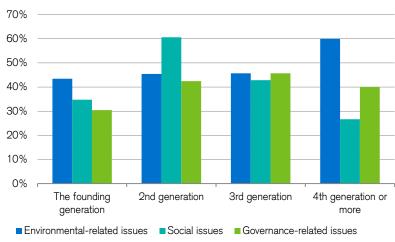


Figure 19 "Does your business have a sustainability strategy?"



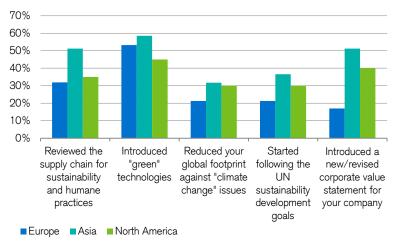
Source: Company data, Credit Suisse

Figure 20 Adoption rate of ESG policies by age of family-owned company



Source: Company data, Credit Suisse

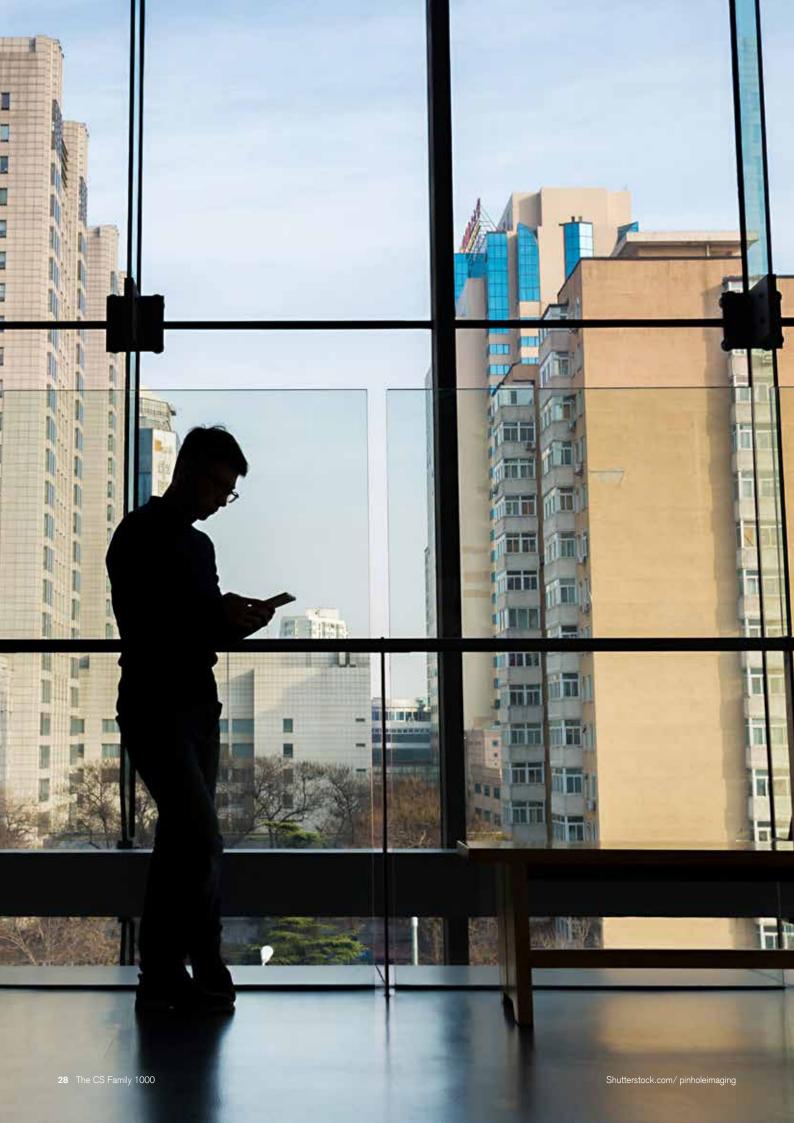
Figure 21 "Which of the following steps have you taken to make your business processes more sustainable?"



Source: Company data, Credit Suisse

8. Adoption of green technologies has been the most popular sustainable strategy so far

We also asked our survey companies which steps they had taken over the past three years to make their business processes more sustainable. Here again, we find that European family-owned companies lag behind their US and especially their Asian peers. The adoption of "green technologies" has been the area of choice for companies focusing on sustainability (see Figure 21). On the other hand, the adoption of the much broader UN sustainability goals remains relatively unpopular, with just 20% of European firms and 37% of Asian family-owned companies having done so.



Potential areas of concern

Concerns that investors sometimes raise in relation to family businesses tend to focus on perceived weaker governance and accounting quality. Using the full HOLT® governance dataset for our US family-owned companies we conclude that governance may be marginally weaker but that this does not seem to impact share-price returns. Financial metrics appear to have the upper hand (at least for now). As for accounting quality, we find no evidence that this is weaker for family-owned companies in any region. If anything, the opposite seems to be true.

Concerns related to family-owned companies

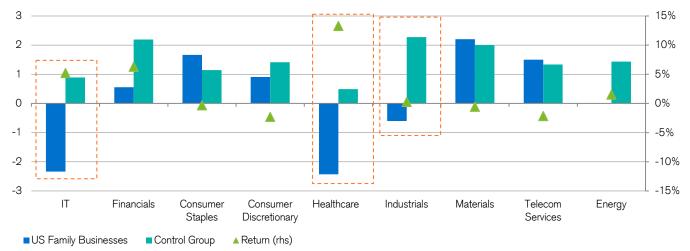
In this section of the report, we review the relevance of some of the key concerns that investors tend to raise in relation to family businesses. These mostly focus on the quality of corporate governance and accounting. The emotional ties that family owners have in relation to the running of the business may, according to some investors, impact procedures of best practice, favoritism toward family members and provide controlling family shareholders with too much control over the business, thus reaping rewards to the detriment of smaller shareholders.

1. Corporate governance

Establishing good corporate governance practices provides shareholders and future investors with greater transparency of the business and can play a role in reducing tensions that may arise between shareholders and management who are responsible for the day-to-day running of the company. Here we address whether family-run companies have good corporate governance and the importance of disclosure in relation to management remuneration. While this question is relatively broad and can often be accustomed to a high degree of subjectivity, we use the Credit Suisse HOLT® proprietary framework on corporate governance as an objective measure to analyze whether CEO compensation aligns itself with the value and the extent to which value is created in an organization.

The breadth of management data available under HOLT is substantial for US companies and we thus use US family businesses as a meaningful proxy for our universe to illustrate whether in fact these companies have sound corporate governance structures and the importance of such structures in the investment process.

Figure 1 Average management incentive scores vs. relative share-price returns of family-owned and non-family-owned firms



Corporate governance in US family businesses is slightly weaker than for non-familyowned companies

The HOLT Management Incentive Scorecard provides an overall score against each company, enabling users to analyze how well the CEO's performance-based incentives are aligned with shareholder value creation. The management incentive scorecard consists of a series of 13 metrics, in which companies are graded in order to determine their overall score and ultimate ranking versus peer groups. The final scores are then totaled and range from +7 (best) to -8 (worst). Scores between 7 and 4 are deemed good, between 0 and 3 are said to be average and below -1 is poor.

Taking the management incentive scores for 117 of the 121 US companies in our family business universe, we find that the median score in the past year is 1 and has remained at this level over the last five years. These companies have a score that is deemed as average although it is important to highlight that this is toward the lower end of the scale. In comparison, our control group of US nonfamily businesses has a score of 2. Although still in the average range, it is higher than the family-owned companies. In Figure 1, we compare the management incentive scores for our US family-owned companies versus our non-family-owned control group and the relative share-price returns across their respective sectors. We find that our family-owned companies score better in consumer staples, materials and telecoms.. Interestingly, we note that in the sectors where the family-owned companies scored worst relative to the control group our family universe did outperform in terms of share-price performance (e.g., IT, financials, healthcare and industrials).

Table 1 provides a summary across the 13 key governance criteria for our family companies versus our control group. Overall, we find that our US family businesses score a lower percentage on

Table 1

Percentage scores across key governance criteria

		US family businesses	Control group
	Operating metrics	82%	89%
\ \ \	Return metric	18%	29%
Positive	Growth metric (sales)	37%	37%
e G	Long-term operating metrics	39%	43%
	Long-term performance period	7%	9%
	TSR benchmark period	13%	34%
	No disclosure	16%	5%
4)	No financial targets	31%	17%
Negative	No long-term plan	60%	53%
gat	Non-operating metrics only	1%	4%
a)	TSR benchmark period	13%	11%
	Stock options/dilution	1%	6%
	Earnings metric only	12%	12%

Source: Company data, Credit Suisse estimates

positive criteria and score higher percentages on negative criteria, thus leading to a lower management incentive score in comparison to our control group. Three areas where our US family businesses score weaker than our control group are: "no disclosure," "no financial targets" and "no long-term plan."

One of the factors underpinning the relatively lower score for our universe of family-owned companies is that 60% of them do not include long-term plan metrics. This compares to 53% of companies in our control group do not include long-term plan metrics.

The second biggest factor influencing the lower management incentive score is that 31% of US family-owned companies do not include financial targets compared to 17% of companies in our control group. The lack of long-term plan metrics and failure to disclose any targets or goals can impinge on investor confidence in family-run companies as there is a lack of visibility with regard to the future success of the business.

Thirdly, 16% of the US family companies that we have analyzed fail to provide any disclosure in relation to how management is compensated. According to HOLT, this lack of transparency is an indicator of poor corporate governance and these firms therefore receive the lowest score of –7. On the other hand, only 5% of companies in our control group fail to provide adequate disclosure in relation to performance metrics.

Lower use of earnings-only remuneration policies

Supportive of governance in family-owned companies is the fact that only a small minority have an earnings-only-based approach. Management can often feel undue pressure to meet investor expectations, particularly in situations where remuneration is tied to earnings performance and in periods where earnings are highly vulnerable to losses. It is under these circumstances that the possibility of earnings manipulation is increased. The use of earnings-based metrics (e.g., EPS) only as a tool for measuring performance ignores the importance of the balance sheet and can enable management to manipulate accounting policies to boost performance in the near term. In the case of our US family-run companies, we find 12% of companies focusing on the use of earnings metrics only, which is at similar levels to our control group, perhaps highlighting a shared view in relation to the importance of the balance sheet.

In conclusion, as far as US family-owned companies are concerned, we see their corporate governance scores as (just) average and slightly weaker than for non-family-owned companies.

But does good corporate governance structure matter?

Figure 2 shows the price performance of our US family-owned companies versus our control group of non-family-owned companies. Despite the median management incentive score for our family-owned companies being lower, the universe has seen an

outperformance of 4% on an annualized basis, which leads us to question the relative importance of sound corporate governance structures.

To illustrate this further, we have compared the governance scores of two companies operating in the same sector – one being family-owned with a low management incentive score, Google, and the other non-family-owned with a high management incentive score, Ebay. Google ranks poorly according to the HOLT management incentive scorecard as it provides no disclosure in relation to how its executives are rewarded, thus scoring –7. Ebay, on the other hand, receives the highest possible score of 7.

While we recognize that other factors may be influential here, the lack of transparency from Google in relation to how its executives are compensated relative to Ebay has clearly not had a negative impact on the relative share-price performance. Over the past five years, Google's share price has increased by roughly 3.5x compared to a "mere" doubling of Ebay's. If arguably weaker corporate governance has not impacted Google's share-price performance, the conclusion must be that other factors are simply deemed more important by the market. In this regard, we notice that Google's cash flow returns have proven much more stable than Ebay's. They have declined less since 2006 and are now higher than Ebay's. It may be that profitability and cash flow matter more to investors than corporate governance.

While the management incentive score can provide a discrete measure of how executive performance aligns itself with wealth creation, operational quality measures the extent to which management is creating value. These two scores combined have enabled us to identify those companies that display a strong ability to align executive compensation with shareholder value creation while also achieving high CFROI levels. This is displayed in the top right quadrant of Figure 5.

We are also able to identify those companies where the governance structure appears to be strong, but the extent to which management is creating long-term value is relatively poor as shown in the bottom right quadrant of Figure 5. A strong corporate governance framework based on wealth-creating principles is clearly only a starting point to assess whether a firm is correctly incentivizing its CEO, but is not the only path to earning a superior CFROI.

Since the financial crisis, the focus on corporate governance has never been greater. While we agree that good corporate governance has to be a clear goal for every company, we do note that the impact on a company's share-price performance is far from clear. With regard to family-owned companies, we believe that their corporate governance appears to be somewhat weaker on average, but not by all that much.

Figure 2

Price performance of US family vs. non-family-owned businesses



Source: Company data, Credit Suisse estimates

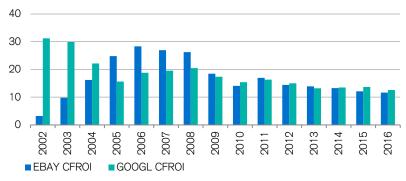
Figure 3

Share-price performance of Google vs. Ebay over the last five years



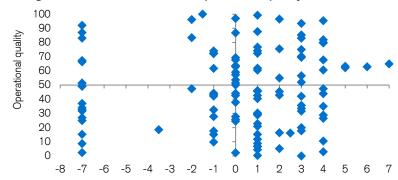
Source: Company data, Credit Suisse estimates, Datastream

Figure 4 **CFROI levels for Google vs. Ebay (%)**



Source: Company data, Credit Suisse estimates

Figure 5
Management incentive scores vs. operational quality



Median mangement incentive score

Figure 6

Accounting quality overall

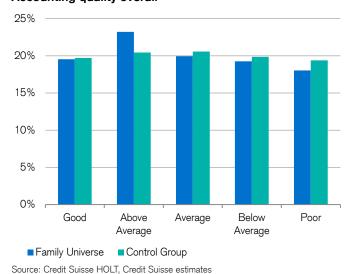
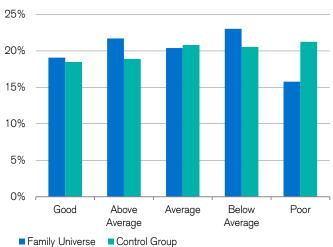


Figure 7

Accounting quality in European firms



Source: Credit Suisse HOLT, Credit Suisse estimates

2. Accounting quality: Concerns are misplaced

Another concern that investors have about family-owned companies is the risk of weaker accounting quality. Our analysis suggests that this risk is misplaced. In light of its importance, we explore the quality of accounting information in family businesses across regions and industries, leveraging the HOLT model on accounting quality in order to assess whether family firms convey financial information of a higher quality compared to their non-family peers.

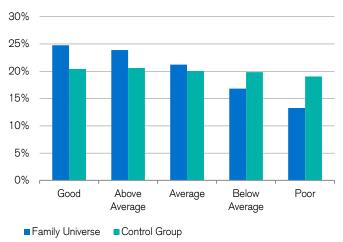
Perhaps in contrast to popular belief, Figure 6 illustrates that the accounting quality of family businesses is in line or slightly superior to our control group of non-family-owned businesses. Some 23% of family-run businesses display above-average

accounting quality compared to 20% for our control group. Observing this on a regional basis also shows a similar pattern, with the strongest readings for US family-run companies (25% of our family-owned universe have "good" accounting quality versus 20% for our non-family-owned universe).

Figure 10 highlights the composition of accounting quality scores across different industry groups within our family universe. Thirty-three percent of the IT companies surveyed display the highest score of "good" accounting quality, followed by healthcare, consumer discretionary and consumer staples. We find these industries are also in the top four industries that display good and above-average accounting quality across our control group, although with a slight change in rank.

Figure 8

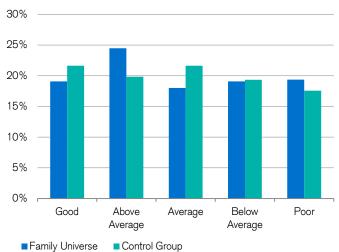
Accounting quality in US firms



Source: Credit Suisse HOLT, Credit Suisse estimates

Accounting quality in APxJ firms

Figure 9

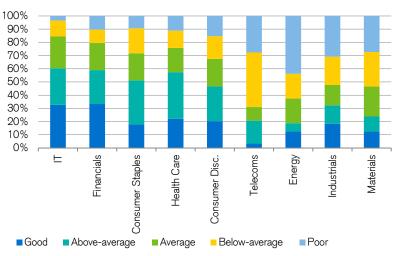


Source: Credit Suisse HOLT, Credit Suisse estimates

The below-average and poorest scores for accounting quality are found in telecoms, energy, industrials and materials in both our family universe and our control group. One of the main reasons for this is, for example in the case of industrial and materials companies (77% and 86% respectively), the below-average and poor quality displayed in relation to the treatment of special items (consistent and material special charges over a 5-year period). Based on the chart, we can only conclude that accounting quality is not a bigger concern for family-owned companies than for companies in general.

Figure 10

Accounting quality in our family universe; sector breakdown







The Asian family business model

Because family businesses in Asia make up such a significant portion of our overall universe, we decided to take a closer look into the performance of these companies relative to their control groups across China, India, Korea, Hong Kong, Singapore, Malaysia and Indonesia.

Chinese family-owned companies perform best

Overall, we find that Chinese family-owned companies have the strongest track record of share-price returns, sales growth and cash flow returns. This does come at a price, however, as they also trade at the highest earnings multiple, both absolute and relative to history. Family-owned companies in India and Indonesia show revenue growth and cash flow returns that are much less impressive when compared to non-family-owned peers - probably also explaining why their relative share-price performance has not been as impressive as that of Chinese family-owned companies, in our view. Korean family-owned companies did manage to outperform their non-family local peers during the past ten years, which again in our view is supported by improving relative growth and cash flow-return statistics. Their relative valuation appears to be among the most attractive in Asia.

An added touch point to our analysis in Asia is our survey results from our Indian and Chinese family-owned companies. Overall, our findings indicate that our Indian family-owned businesses appear to be more optimistic with regard to future revenue growth and have a slightly more conservative approach to funding that growth. Challenges seen as most prominent in India include succession planning. Interestingly, this is deemed least important to Chinese family-owned companies that worry much more about technological disruption.

Share-price returns of Asian family businesses outperform

We highlighted earlier that, on a sector-adjusted basis, our global family business universe has outperformed the non-family control group. In a similar fashion, our family businesses based in Asia ex Japan have also shown an outperformance of 3% since 2006 relative to their non-family business control group (see Figure 3).

Figure 1

Average market cap of Asian family businesses by country (USD bn)

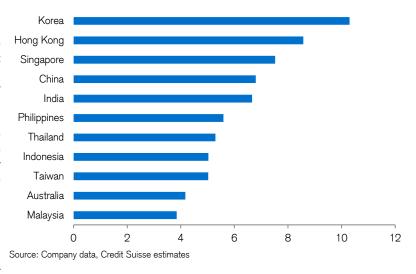


Figure 2

Sector breakdown of our Asian family businesses

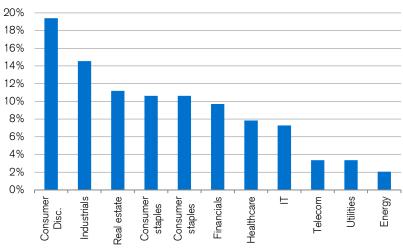
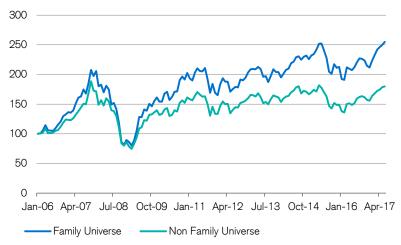


Figure 3

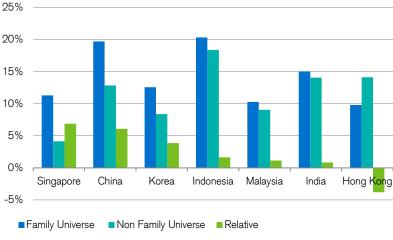
Family-owned returns relative to non-family control group in APxJ (sector adjusted)



Source: Company data, Credit Suisse estimates

Figure 4

Relative excess returns for family-owned companies by country (equal weighted)



Source: Company data, Credit Suisse estimates

Figure 5

Chinese companies generate the strongest sales growth relative to non-family-owned



Source: Company data, Credit Suisse estimates

At a country level, to better evaluate the price performance of our Asian family businesses relative to the control group, we have modified our methodology to account for the limitations that are driven by the smaller sample sizes and have therefore looked at the share-price performance of these companies on an equal-weighted basis (see Figure 4). We have found the greatest relative returns have been achieved by our Singapore and Chinese family-owned companies. Relative returns were lowest in the case of family-owned companies in India and Hong Kong. In the latter case, we also note that absolute returns were the lowest among our Asian family-owned universe.

Chinese companies excel in growth and CFROI

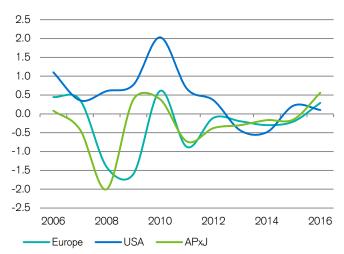
In our study, we have noted the superior sales growth difference between family and non-family-owned companies, with Asian companies generating a positive return last year of 6% and an average return of 3.8% since 2006.

Observing this for the countries within Asia specifically, we find positive revenue growth across all seven country groups last year, with the exception of our Hong Kong and Indonesia-based family-owned companies (see Figure 5). Chinese family-owned companies generate the highest revenue growth relative to their respective non-family control group, returning an average of 19% over the last ten years. Singapore-based family-owned companies have shown an improvement in sales growth in recent years, which is also visible for family-owned companies in Korea.

Highlighted elsewhere in the report, cash flow returns for our family universe have been superior to our non-family-owned control group. In regional terms, this pattern holds true for Asia ex Japan, where returns have been positive in the past year and momentum has been improving since 2011 (see Figure 6). At a country level, the average CFROI witnessed since 2006 across China, Korea, Hong Kong and Malaysia have been positive relative to non-family-owned companies (see Figure 7). This differs for India, Singapore and Indonesia, where our non-family-owned companies have outperformed.

Figure 6

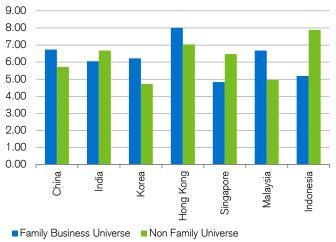
Cash flow return difference by region



Source: Company data, Credit Suisse estimates

Figure 7

Absolute average CFROI for our Asian family businesses vs. non-family businesses



Source: Company data, Credit Suisse estimates

APxJ family-owned companies trade at a premium

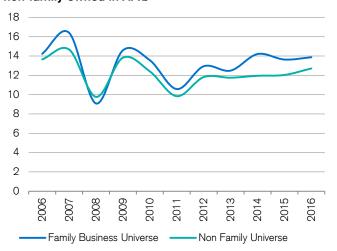
To understand whether the relative financial performance of family-owned companies across Asia has been reflected in share prices, we also reviewed valuation multiples (see Figure 8). Similar to the findings for our global family universe, family-owned companies in APxJ have traded at a premium relative to non-family-owned companies since 2006, recording a 10-year average of 8%. An exception to this was during the financial crisis of 2008, where family-owned companies in APxJ traded at a discount of -7% relative to non-familyowned companies.

At a country level, our Chinese, Indian and Indonesian family-owned companies appear to be the most expensive, trading at high absolute multiples (see Figure 9). Relative to their respective control groups, we find that Chinese family-owned companies trade at a much wider premium currently than they have done historically. It seems that their relative financial performance has therefore been captured relatively strongly in valuation terms.

On the other hand, family-owned companies in Korea, Hong Kong and Singapore appear much cheaper. Absolute multiples are lower than for familyowned companies elsewhere and their valuation relative to non-family-owned peers is also below the 10-year average.

Figure 8

12-month forward P/E for family-owned vs. non-family-owned in APxJ



Source: Company data, Credit Suisse estimates

Figure 9

Median 12-month forward P/E since 2006 for our Asian countries

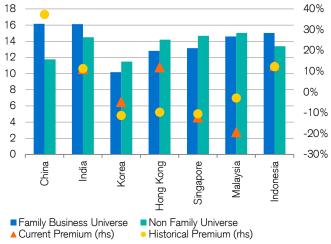
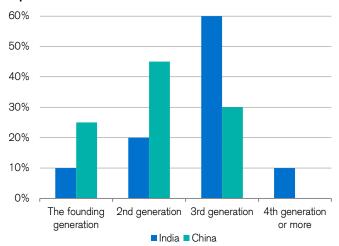


Figure 10

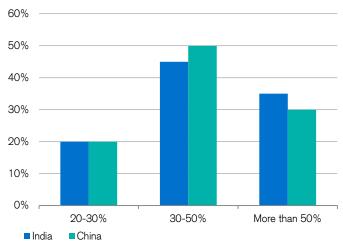
Which generation do the current owners of the business represent?



Source: Company data, Credit Suisse estimates

Figure 11

What percentage of your company is owned by family members or the founders?



Source: Company data, Credit Suisse estimates

What do our Chinese and Indian family businesses think?

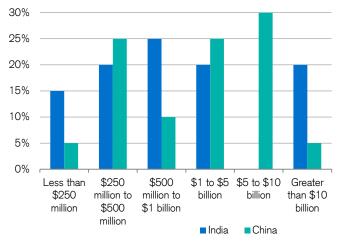
In order to provide more context to the Asian family-owned business model, we interviewed 20 family businesses in both China and India from our universe. Figures 10–13 highlight the profile of these companies, showing that the Indian companies surveyed are more mature, with 60% of our Indian family businesses in their third generation compared to 30% of our Chinese companies. However, the percentage of family ownership is at similar levels in both countries. More than half of the Indian and Chinese family companies that we surveyed generate revenues in excess of USD 500 million, with the majority of these businesses located across sectors of IT, financials and industrials.

Indian companies boast optimism for future revenue growth

The overall results from our survey highlighted a bullish stance from our family-owned companies, with the majority expecting revenue growth over the next three years to be more than 10%.

Aspirations for future revenue growth over the next three years remain particularly strong for India, with more than half of the companies surveyed expecting to generate revenues of more than 20% over the next three years. While for our Chinese companies, none indicated revenue growth beyond 20%, relative to their own history, Chinese companies still appear to be bullish with 65% expecting growth of between 10% and 20%.

Figure 12
What is your company's annual revenue?



Source: Company data, Credit Suisse estimates

Figure 13
Which of the following sectors best describes your business?

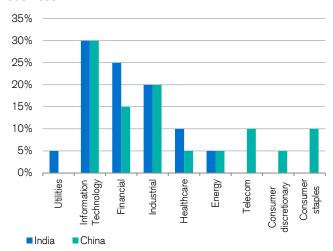


Figure 14 Historical revenue growth vs. future growth - India

60% 50% 40% 30% 20% 10% 0% 5-10% 10-20% More than 20% ■ Last Year ■ Next 3 years

Source: Company data, Credit Suisse estimates

As we highlighted elsewhere in this report, the preferred funding of new investments by our family-owned companies and by implication, future growth is largely carried out through conservative channels, mainly internally generated funds. This resonates particularly well for India too, where 45% of companies rely on internally generated funds to conduct new investments.

For our Chinese companies, this stands at 30%, although it is still the preferred mechanism to fund future acquisitions. Interestingly, our Chinese companies show a greater appetite to take on debt with a quarter of these companies indicating financing through the use of debt is used to fund future growth, compared to only 10% for India (see Figure 16).

Key concerns differ between India and China

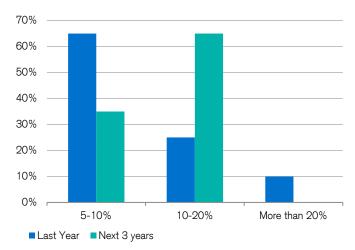
When asking our family-owned companies what concerns them most, we find an interesting disconnect between the responses from India and China.

For our Indian respondents, greater competition and the need to retain talent lie at the forefront of concerns, which mirrors the overall results of the survey. Additionally, while the overall findings of the survey indicate that our respondents do not seem to be too concerned with succession planning, on a country level, 45% of our Indian family respondents have indicated that it is very concerning (see Figure 17).

On the other hand, Chinese family-owned companies rank succession planning as their least important issue, which may suggest that Chinese family owners have stronger ties to their companies and therefore do not envisage a reduction in ownership (see Figure 18). However, they tend to worry much more about the threat of technological disruption, which in turn may be driven by China's overall greater exposure to disruptive technologies globally and its state of economic development.

Figure 15

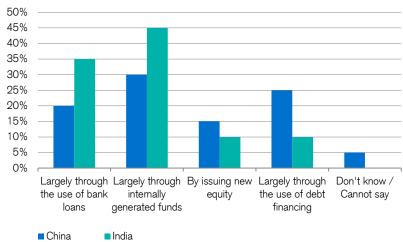
Historical revenue growth vs. future growth - China



Source: Company data, Credit Suisse estimates

Figure 16

Mechanisms for funding new investments, acquisitions or overall



Source: Company data, Credit Suisse estimates

Figure 17 What concerns you the most over the next five years? India

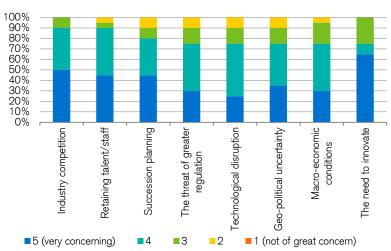


Figure 18

What concerns you the most over the next five years? China

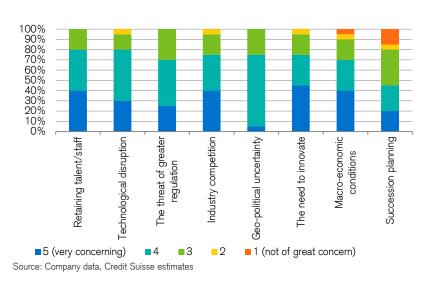
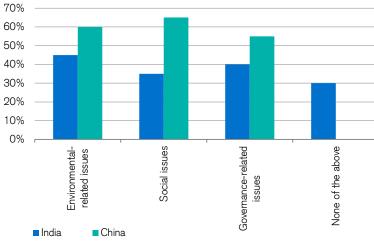


Figure 19

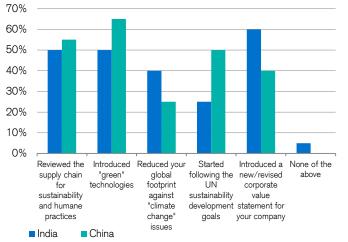
Does your business have a sustainability strategy across the following?



Source: Company data, Credit Suisse estimates

Figure 20

Steps taken to make business processes more sustainable during the past three years



Source: Company data, Credit Suisse estimates

ESG in our Asian family businesses

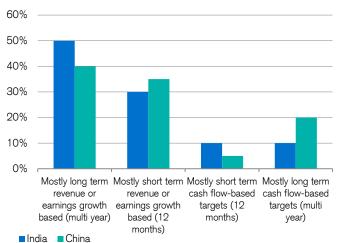
In terms of policies aimed at ESG issues, we find that sustainability strategies are notably more present in Chinese family-owned companies than in the case of family-owned companies in India. More than half of the Chinese companies we surveyed were implementing strategies across environmental, social and governance (ESG) related issues. More than 60% of Chinese companies have adopted "green technologies," whereas half of the Chinese firms surveyed have adopted the UN Sustainability Development Goals.

India lags slightly behind China not just on the adoption of environmentally related issues, but also on socially related issues, with 35% of companies implementing policies in relation to this compared to 65% for China.

As far as governance is concerned, we note that remuneration policies adopted by family-owned companies in Asia tend to be more long-term focused. Sixty percent of Indian and Chinese companies were focusing on long-term revenue or cash flow growth.

Figure 21

Which key parameter is incorporated in your corporation's senior management remuneration program?



Who are the Asian family-owned companies?

Тор	Top 50 companies by market cap.			Top 50 companies by revenue growth				Top 50 companies by share-price returns			
	Company	Mkt. cap. (USD bn)		Company	Avg. rev. growth*	Mkt. cap. (USD bn)		Company	Avg. share price returns*	Mkt. cap. (USD bn)	
1	Alibaba Group	456	1	Holitech Technology	115%	5	1	China Evergrande	109%	51	
2	Samsung Electronics	303	2	Kaile Science & Tech. Hubei	95%	3	2	Geely Automobile Hdg.	99%	28	
3	Reliance Industries	83	3	Ck Hutchison Holdings	85%	50	3	Hanmi Science	89%	5	
4	Baidu	82	4	Nanjing Xinjiekou Dpste.	69%	7	4	Bajaj Finance	89%	17	
5	Tata Consultancy Svs.	74	5	Geely Automobile Hdg.	58%	28	5	Sunac China Holdings	84%	19	
6	Jd.Com	65	6	Berli Jucker	53%	6	6	Hengtong Optic-Electric	70%	6	
7	China Evergrande	51	7	Hubei Biocause Pharm.	52%	6	7	Bajaj Finserv	70%	14	
8	Ck Hutchison Holdings	50	8	Jd.Com	47%	65	8	Hanmi Pharm	69%	4	
9	Jardine Strategic Hdg.	49	9	Zhongtian	47%	5	9	Nanjing Xinjiekou Dpste.	67%	7	
10	Sun Hung Kai Properties	49	10	China Evergrande	45%	51	10	Country Garden Holdings	65%	39	
11	Jardine Matheson Hdg.	46	11	Alibaba Group	44%	456	11	Kingboard Laminates Hdg.	64%	5	
12	Country Garden Holdings	39	12	Oriental Energy	42%	3	12	Kingston Financial Group	56%	6	
13	Bank Central Asia	35	13	Natco Pharma	39%	2	13	Dewan Housing Finance	48%	3	
14	Oversea-Chinese Bkg.	34	14	Tpg Telecom	37%	4	14	Aac Technologies Hdg.	45%	22	
15	Kotak Mahindra Bank	30			36%	6		Yes Bank	45%	13	
16	Galaxy Entertainment Gp.	30	15	Hengtong Optic-Electric			15				
17	United Overseas Bank	29	16	Country Garden Holdings	35%	39	16	Zhej.Wanfeng Auto Wheel	44%	6	
18	Henderson Ld.Dev.	28	17	Bajaj Finance	34%	17	17	Britannia Inds.	44%	8	
			18	Aac Technologies Hdg.	33%	22	18	T V S Motor	42%	5	
19	Geely Automobile Hdg.	28	19	Reliance Capital	32%	3	19	Kaile Science And Tech. Hubei	42%	3	
20	Wharf Holdings	28	20	Genting Hong Kong (Ses)	32%	2	20	Zhejiang Supor	42%	5	
21	Hyundai Motor	28	21	Yes Bank	30%	13	21	Ashok Leyland	42%	5	
22	Hong Kong And China Gas	26	22	Fujian Newland Computer	30%	3	22	Fangda Special Stl.Tech.	41%	3	
23	Clp Holdings	26	23	Kotak Mahindra Bank	30%	30	23	Nine Dragons Paper Hdg.	41%	10	
24	Jiangsu Hengrui Medicine	25	24	Yanlord Land Group	29%	3	24	Minth Group	39%	6	
25	Bharti Airtel	25	25	China Med.Sy.Hdg.	26%	4	25	Shenzhou Intl.Gp.Hdg.	39%	12	
26	Astra International	24	26	Sun Pharm.Industries	26%	19	26	Hanergy Thin Film Power Group	39%	21	
27	Cheung Kong Infr.Hdg.	23	27	Aurobindo Pharma	26%	7	27	Eicher Motors	38%	14	
28	Jiangsu Yanghe Brew.Jst.	22	28	Zhejiang Huahai Pharm.	26%	3	28	Jiangsu Hengrui Medicine	37%	25	
29	Aac Technologies Hdg.	22	29	Zhej.Wanfeng Auto Wheel	25%	6	29	Long Yuan Construction Gp.	37%	2	
30	Wipro	22	30	Meidu Energy	25%	3	30	Sinar Mas Multiartha	37%	5	
31	Hanergy Thin Film Power	21	31	Ashok Leyland	25%	5	31	Man Wah Holdings	35%	4	
32	Cathay Finl.Hldg.	20	32	Press Metal	24%	3	32	Natco Pharma	35%	2	
33	Sm Investments	20	33	Dewan Housing Finance	24%	3	33	Agile Group Hdg.	35%	6	
34	Hindustan Zinc	20	34	Sino Land	23%	11	34	Hubei Biocause Pharm.	35%	6	
35	Sm Prime Holdings	20	35	Nagacorp	23%	3	35	Kangmei Pharm.	34%	15	
36	Hcl Technologies	19	36	Anta Sports Products	23%	11	36	Lee & Man Paper Mnfg.	34%	6	
37	Public Bank	19	37	Page Industries	22%	3	37	Holitech Technology	33%	5	
38	Sunac China Holdings	19	38	Kingsoft	22%	3	38	Sun Tv Network	32%	5	
39	Sun Pharm.Industries	19	39	Kuala Lumpur Kepong	22%	6	39	Page Industries	32%	3	
40	Tata Motors	19		Jiangsu Hengrui Medicine	21%	25		Longfor Properties	32%	17	
41	Fosun International	19	40				40	0 1			
42	Asian Paints	18	41	China Hongqiao Group	21%	7	41	Max Financial Svs.	32%	3	
43	Siam Cement	18	42	Hualan Biological Engr.	21%	4	42	Nanjing Iron & Steel	31%	3	
			43	Zhejiang Chint Electrics	21%	7	43	Aditya Birla Nuvo	31%	4	
44	Cp All	18	44	Baidu	21%	82	44	Press Metal	30%	3	
45	Hong Kong Land Hdg.	17	45	Zhejiang Hailiang	20%	2	45	Zhongsheng Gp.Hdg.	30%	5	
46	Bajaj Finance	17	46	Shui On Land	20%	2	46	Hindustan Zinc	30%	20	
47	Longfor Properties	17	47	Minth Group	19%	6	47	Voltas	30%	3	
48	Thai Beverage Public	17	48	Hanssem	19%	3	48	Marico	30%	7	
49	Fubon Finl.Hldg.	16	49	Divis Laboratories	18%	4	49	Anta Sports Products	29%	11	
50	Siam Commercial Bank	16	50	Info Edge (India)	18%	2	50	Zhejiang Huahai Pharm.	29%	3	

Source: Datastream, Credit Suisse Research; Annual average revenue growth and share-price returns for 2014–2017; USD 2 bn market cap threshold. Family-owned company defined as (1) direct shareholding by founders or descendants of at least 20%; (2) voting rights held by founders or descendants of at least 20%.

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CREDIT SUISSE AG

Research Institute Paradeplatz 8 CH-8070 Zurich Switzerland

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