

# ROYAL HALI

## Market Outperformer

### Textile

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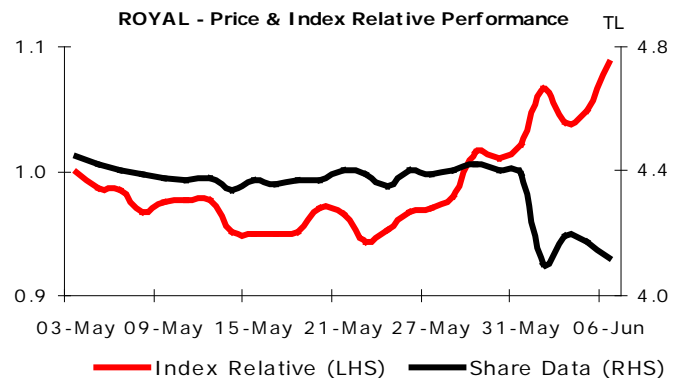
## Rolling out the red carpet

- **We are initiating coverage of Royal Hali with a 'Market Outperformer' rating on TL6.80/share target price, 65% upside potential.** The company is a leading carpet and polypropylene yarn producer in Turkey which generated TL222.5mn revenues, TL45.4mn EBITDA and TL41.9mn net profit in 2012.
- **Royal offers investors a portfolio with healthy risk diversification.** We see a good balance between the "domestic and end-user" oriented carpet business (c.50% of top-line), and an "export and intermediate-user" oriented yarn business (c.40% of top-line).
- **Royal Hali made a strong name in the carpet market thanks to its innovative skills.** Royal's innovations include "anti-bacterial" carpet, dirt-repellent "nano" carpet (first in the world), carpet insurance, virtual decoration apps for iPhone/iPad.
- **The yarn business is also very solid,** given the distinguished client base (supplies to the leading global carpet producers such as Balta, Associated Weavers...) and the fixed EBITDA margin nature.
- **Why we like Royal Hali?** We see the company as a valuable new alternative on the list of companies to proxy anticipated housing demand growth in Turkey. The solidity of the yarn business adds further juice to the story: the segment is operating at full CUR and the demand outlook promises that it will continue to do so going forward. Funded by the IPO proceeds, Royal is expanding its installed capacity by c.20% in both segments, which will drive a 13% CAGR at top-line and EBITDA in 2012-17F.
- **A potential dividend bet.** Management aims for min. 80% pay-out from 2013 and min. 50% pay-outs from 2014-2015 operations.
- **Lucrative multiples.** Royal Hali went public on May 3 where it raised TL44.5mn. Since then the stock outperformed the benchmark index by 8%, and is currently trading at lucrative 4.8x 2013F EV/EBITDA and 7.6x 2013 P/E.

### Stock Data \*

Price (TL/US\$)	4.12 / 2.18
Target Price (TL/US\$)	6.80 / 3.60
1-Year Price Range (TL)	4.47 / 3.75
Number of Shares (000)	60,000
Market Cap. (TLmn)	247
Net Cash (2013/03, TLmn) **	3
Free Float	28,75%
Daily Vol. (3 Month, TLmn)	1.7
Ticker (Reuters, Bloomberg)	ROYAL.IS, ROYAL TI
ISE-100 Index (TL / US\$)	75,895 / 40,241

(\*) Price data as of June 6, 2013 \*\*including IPO proceeds



### Stock Performance

	1 Week	1 Month	3 Month	1 Year
TL	-6.4%	-6.8%	-	-
Index Relat.	7.5%	10.3%	-	-

### Forecasts (IFRS, TLmn) & Valuation

	2011A	2012A	2013F	2014F
Net Sales	212	222	250	284
EBITDA	40	45	51	59
Net Profit	2	42	32	39
EV/Sales	1.5	1.2	1.0	0.9
EV/EBITDA	7.7	6.0	4.8	4.1
P/E	100.0	5.9	7.6	6.4

### Shareholding Structure

Naksan Holding	46.25%
Nakiboglu Family	25.00%
Free Float	28.75%



## ***TABLE OF CONTENTS***

<b>Investment Theme</b>	<b>1-10</b>
<b>Risks</b>	<b>10</b>
<b>Valuation</b>	<b>11-12</b>
<b>Financial Analysis</b>	<b>13-22</b>
<b>Forecasts</b>	<b>23-24</b>
<b>The Company</b>	<b>25-26</b>
<b>Overview of the Carpet Segment</b>	<b>27-37</b>
<b>Overview of the Yarn Segment</b>	<b>38-41</b>
<b>Summary Financials</b>	<b>42</b>
<b>Appendix I – Global Carpet Sector</b>	<b>43-44</b>
<b>Appendix II – Carpet Types &amp; Styles</b>	<b>45-47</b>
<b>Appendix III – Carpet Yarns</b>	<b>48-49</b>
<b>Appendix IV – Gaziantep</b>	<b>50-51</b>
<b>Appendix V – Samples from Royal’s collections</b>	<b>52</b>
<b>Appendix VI – Photos from Royal’s facilities</b>	<b>53-54</b>
<b>Appendix VII – Glossary</b>	<b>55-56</b>

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## INVESTMENT THEME

We are initiating coverage of Royal Hali with a 'Market Outperformer' rating on TL6.80/share target price, 65% upside potential. The company, which went public on May 3, 2013, is a leading carpet and polypropylene yarn producer in Turkey with 2012 revenues of TL222.5mn, EBITDA of TL45.4mn and net profit of TL41.9mn. The company offers investors a healthy risk diversification at its operational portfolio, where a domestic and end-user oriented carpet business (c.50% of top-line) is balanced by an export and intermediate-user oriented yarn business (c.40% of top-line). Royal Hali made a strong name in the carpet market, thanks to its innovative skills ("anti-bacterial" carpets, dirt-repellent "nano" carpets (first in the world), carpet insurance, virtual decoration apps for iPhone/iPad...etc). The yarn business is also very solid, given the distinguished client base (supplies to the main global carpet producers) and the fixed EBITDA margin nature.

We see Royal Hali as a valuable new alternative to proxy anticipated housing demand growth in Turkey. The strength of the yarn business adds juice to the story: the segment is operating at full CUR and the demand outlook promises that it will continue doing so going forward. Funded by the IPO proceeds, Royal is expanding its installed capacity by c.20% in both segments (already mostly completed), which will drive a 13% CAGR at top-line and EBITDA in 2012-17F. The stock also promises to be a significant dividend bet, given management's aim for a min. 80% pay-out from 2013 and min 50% pay-outs from 2014-2015 operations. Royal Hali outperformed the BIST-100 by 8% since its IPO, and is now trading at 4.8x EV/EBITDA and 7.6x P/E (2013F), vs. peer median of 8.0x and 13.8x, respectively.

**Turkey: a traditional figure at the heart of carpet culture...**

*30% of the machine-made rugs traded internationally are produced by Turkish carpet manufacturers*

Turkey has traditionally been a central figure of the world's carpet culture alongside several Middle and Far Eastern countries. It has earned a deserved respect for the hand-made carpets woven by its artisans, which have decorated the floors of millions of homes worldwide over the centuries. As in many areas, the industrial revolution led to a massive transformation in the carpet sector, and in today's houses, machine-made carpets have dominantly taken over the place of hand-made ones. One thing remains unchanged however: Turkey still occupies center stage in the business. Around 31% of the machine-made woven carpets traded globally are produced by Turkish manufacturers, globally ranking the country the number one in this category.

Note that with 1,000 production looms, Turkey accounts for 40% of global capacity, of which c.90% is based in Gaziantep, in the South-East of Turkey.

#### Royal Hali: a young player in the major league

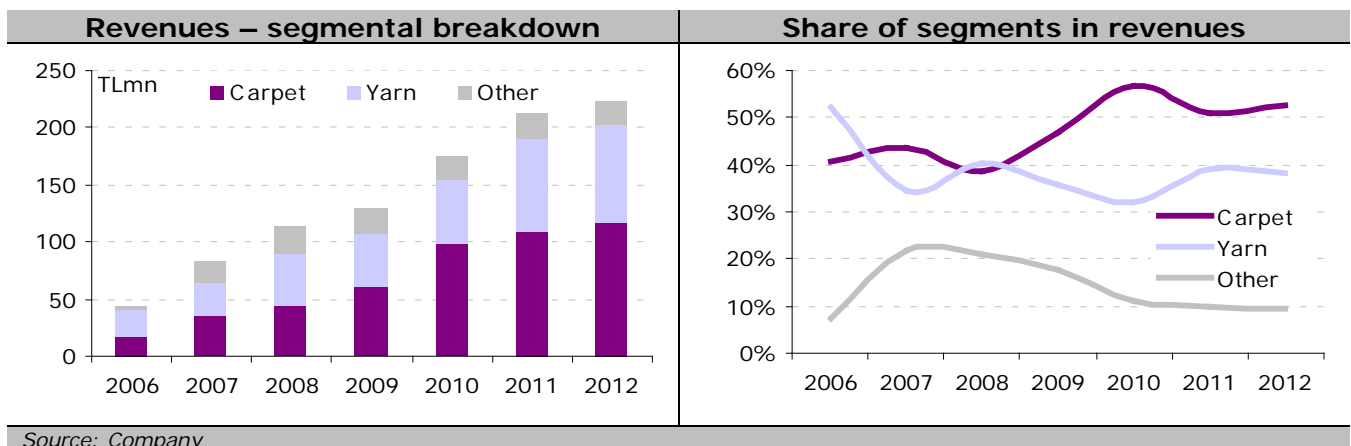


Royal Hali was founded in Gaziantep by one of the foremost entrepreneurial forces of the city, the Nakiboglu family, and entered carpet business in 2005. The company swiftly developed into one of the leading producers in the carpet industry with its extensive design and innovation capabilities. The company created its core “Royal” brand from scratch, and then diversified its portfolio by adding well known global brand “Pierre Cardin” in 2007 to tap both local and global markets. The portfolio was further enriched with the acquisition of Atlas Hali in 2010, a renowned local brand. In 2006-12, Royal recorded a 16% CAGR in carpet volumes to 2.03mn sqm and 37% CAGR in carpet revenues to TL117mn.

#### The company also operates a yarn production plant

Royal also produces Polypropylene (PP) yarn, which is used as input in carpet production. Yarn production is carried out under the “Royal BCF” name. We note that Royal Hali primarily uses higher value-added acrylic yarn (and not PP yarn) as input in its own carpet production. Thus, only a negligible portion of the PP yarn produced by Royal BCF is consumed internally, with almost all production being sold to international third parties with a high profit margin. This segment, which is thus largely export oriented, recorded 16% CAGR in volumes (to 16k tons) and 24% CAGR in revenues (to TL85mn) in 2006-12.

Overall, carpet and yarn segments made up 53% and 38% of total revenues (TL222.5mn) in 2012, respectively, while the remainder was generated from traded carpets and other home textile products purchased from third parties, and sale of some plastic raw material purchased from Naksan Plastik.



## A balanced business portfolio...

We perceive a good balance between the carpet and yarn businesses of Royal, from geographical (domestic vs. export exposure) and target client (end user vs. intermediate user) standpoints, ensuring a healthy risk diversification.

*A healthy risk diversification from geographical and target client standpoints...*

Machine made carpets can be categorized into two groups, both in terms of utilization purpose and production technique. In that context, the majority of carpets sold today are either rugs, or Wall-to-Wall (WtoW) carpets, and either produced by weaving or tufting methods – we note that rugs are generally woven, while WtoW carpets are generally tufted. In Turkey, consumers typically prefer rugs over WtoW, whereas in Europe (particularly in UK) and the US it is the other way around. Royal Hali's target clients are domestic end users (for residential use), whereas Royal BCF's clients are major global WtoW carpet producers globally. In that context, we observe a domestic and end-user oriented carpet business balanced by an export and intermediate-user oriented PP yarn one.

While one may consider the lack of direct synergy between the carpet and yarn business of Royal Hali (PP yarn produced by Royal BCF not being used by Royal Hali in production) as a disappointment, we argue that there is indeed an indirect synergy effect stemming from having two separate businesses. PP and acrylic carpets cater to different tastes, and thus to different markets in practice. In that context, Royal Hali's acrylic carpets do not compete with the PP carpets of Royal BCF's clients in the market. Consequently, Royal BCF's clients do not feel concerned about their new collections and designs being imitated by its supplier's sister carpet producer.

**We see Royal as a new alternative at the BIST (Istanbul Stock Exchange) to proxy the glittering growth prospects of Turkish housing demand**

Annual housing demand in Turkey, currently estimated at c.400K units, is expected to grow significantly going forward, supported by population growth (c.1% pa), rising urbanization rate (from current 77% to an estimated 84% by 2023F), household growth combined with falling household size (current 4.10 to 3.79 by 2023F) and replacement demand, backed by earthquake sensitive new housing demand in Turkey.

*Almost half of the existing housing stock in Turkey needs to be renovated*

On top of this, almost half of the existing housing stock in Turkey, estimated at 18.1mn units as of end-2011, requires renovation, according to data compiled by the association of Real Estate Investment Companies (GYODER). For this purpose, the Government aims to gradually rebuild old and unlicensed housing under urban transformation projects over the next 20

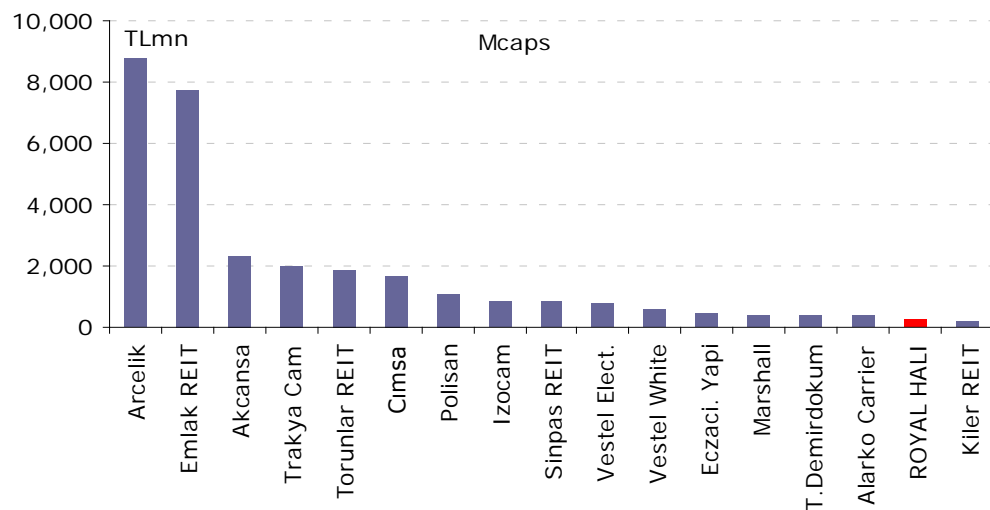
years with an estimated budget of US\$400bn. Indeed, the initial phase of these projects recently kicked-off. All factors included, GYODER projects that Turkey needs c.670K new residential units p.a. in the next decade.

<b>Total Housing Stock of Turkey (end-2011)</b>		
	(units-mn)	% of Total
# of Residences	18.1	
<b># of Residences Requiring Renovation</b>	<b>8.2</b>	<b>45%</b>
# of Residences without Construction permits	5.1	28%
# of Residences Older than 50 years	3.1	17%
Source: GYODER		

Year	Urban Population (mn)	Demographics & Urbanization-based Housing Need ('000)	Renewals ('000)	Urban Transformation ('000)	Total Housing Need ('000)
2013	59.7	352	50	90	492
2014	60.9	358	50	200	608
2015	62.0	401	50	200	651
2016	63.2	406	50	200	656
2017	64.4	412	50	200	662
2018	65.5	413	50	200	663
2019	66.6	419	50	200	669
2020	67.8	426	50	200	676
2021	68.9	430	50	200	680
2022	70.1	440	50	200	690
2023	71.1	430	50	200	680
Source: GYODER					

The BIST hosts several different names (from REITs to consumer durables, cement, building materials and flat glass producers) that provide exposure to this immense potential lying ahead. And given that carpets and rugs are inseparable parts of Turkish home decoration and daily life, we see the carpet sector (and in turn Royal Hali) as a valuable new alternative on the list of companies to proxy anticipated housing demand growth in Turkey.

#### Selected listed co's for exposure to Turkey's housing demand growth



Source: ISE, Ak Investment



Royal Hali plans to increase the number of looms it owns to at least 27 by 2017, from 19 at end-2012: 2 new looms are already on line, further 2 are on the way. When realized, the investments will lead to at least 40% increase in the company's installed carpet capacity, providing it with a strong production power to meet the expected growth in demand. Plus the company is currently evaluating to purchase an Axminster loom, which would enable penetration to niche segments such as contract carpets for hotels, leisure areas...etc. Note that company's current looms are all Wilton type. It is estimated that there are only a few number of Axminster looms in operation in Turkey.

*The carpet renewal period in Turkey is an average of 10 years, vs. 2 years in Europe...*

One other support to demand would come from the shortening carpet renewal period, which is currently estimated to be 10 years in Turkey. With the changing tastes of the younger generation, carpets are increasingly being seen as decorative objects. And helped by accelerating residential remodeling activity, increased affordability thanks to mass production, and a significant increase in product numbers of assorted design, carpet renewal periods are expected to gradually narrow – note that the European average for carpet renewals is estimated to be at 2 years.

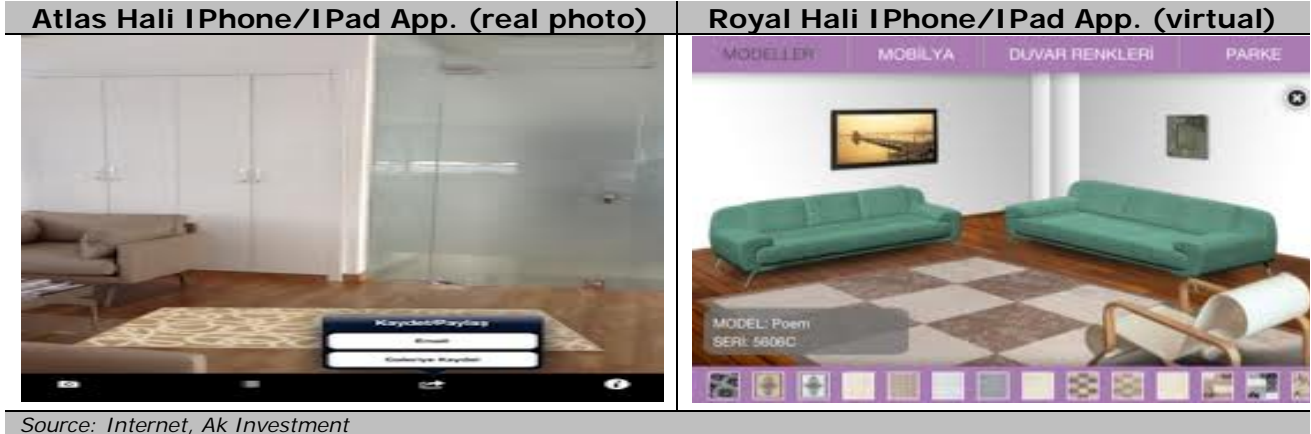
*Its innovative skills have elevated Royal Hali to a leading position in the market*

**Royal made a strong name in the market, thanks to its innovative skills...**

Despite being a relatively new player, Royal Hali has earned a respected name in the market not only thanks to high-quality production and attractive design capabilities, but also to its acknowledged innovation. Note that:

- Royal Hali is the inventor of the “anti-bacterial” carpet, which offers a 3 layer protection against bacteria, fungus and mites.
- For the first time in the world, Royal Hali launched a new product called “nano carpet” for its Atlas brand, which carry self-cleaning and dirt-repellent features. Nano carpet is produced from a chemically processed yarn which refreshes its colors when it receives direct sunlight. Moreover, the spilled liquids cannot infiltrate to the fiber and remain on the surface of the carpet, thus no stain is formed.
- The company performs “Art of Ebru (paper marbling)”, which is one of the oldest and most prestigious Turkish arts, to produce unique designs on carpets. Royal is the only producer in the market that has a set-up for performing this art.
- As part of the distinctive “Sigorthali” feature, the company insures the carpets it sells for a year and promises to replace them with new ones if they become damaged, even if due to improper customer use.

- Royal is the only carpet producer to have created an iPad/iPhone application, namely “FotoDeco”, which gives users the possibility to take the photo of the room that they are planning to buy a carpet for, and insert the collections of Atlas Hali into the photo to select the most suitable carpet for that room. The company also provides virtual decoration applications for the collections of Royal and Pierre Cardin.



- Royal Hali created an intra-group website for its sales people, namely “Halicilarburada.com”. The company uses this platform to maintain closer communication with its sales force, thereby overcoming a major setback of the wholesaler based distribution system, i.e. lack of direct contact with sales people. The company manages the Sigorthali insurance system through this website and requires its sales force to register their sales online to activate the insurance feature. In this way, the company gets the ability to trace sales performance on a daily basis.

#### Atlas brand to use direct distribution - potential upside to EBITDA

*A new route-to-market is introduced through the Atlas Hali organization...*

Royal Hali is using a wholesaler based distribution system from the outset for its Royal and Pierre Cardin brands. Yet with Atlas Hali brand, which was acquired in 2010 and re-launched last year, Royal introduced a new route-to-market: direct distribution to retail sales points. Actually, this method is already used by a couple of rivals, but Atlas Hali has a new aspect here: the company bases the system on a single warehouse and outsources the logistics services to a well known logistics firm, namely “Yurtici Logistics”, to secure timely delivery of orders to retailers.

In fact, both systems have benefits and setbacks. Wholesaler based distribution provides the producer with exposure to the established retailer network, thus enables rapid penetration particularly for a new entrant. Furthermore, producer deals solely with the wholesaler who undertakes the entire payables risk of the retailer. On the other hand, in direct distribution

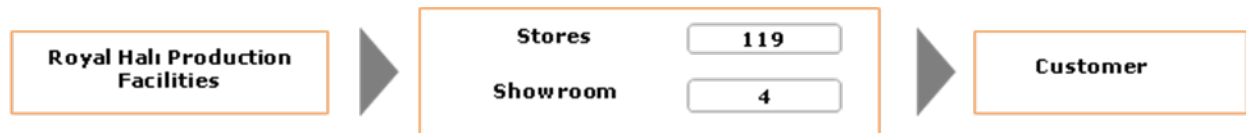
the producer saves on wholesaler commission (in Royal's case 12-17% of revenues), while direct contact with retailers enables it to follow sales trends and manage the sales force more effectively. The management believes that they will be able to generate positive contribution to overall margins from the direct distribution method used for Atlas.

## Royal Hali – Domestic sales flow



Source: Company data Store and showroom figures are as of end-2012

## Atlas Hali – Domestic sales flow



Source: Company data Store and showroom figures are as of end-2012

*Royal plans to increase the number of showrooms from current 178 to 250 in 2013*

### Investments planned to increase visibility...

Despite being a very young company which entered the carpet business in 2006 though introducing a totally new brand (i.e., Royal Hali did not acquire an operation that was already up and running), the company has earned a respectable name in the market. From this point on, Royal Hali seeks to further capitalize on the considerable market experience of its management team, as well as its proven design capabilities and efficient production methods to grab a higher share of the market. The company plans to put greater effort into increasing its visibility for the same purpose, and plans to do so particularly through investing in showrooms (initially from 178 in 2012 to 250 in 2013). The key target going forward is to increase the presence in Istanbul, which currently has a 10% share in Royal's total sales, despite the fact that the region is considered to account for over 30% of total carpet demand in Turkey.

### Potential for higher contribution from exports...

Even though exports have a smaller share in Royal's carpet business (TL23mn in 2012, at 20% of sales), the company considers them crucial for market diversification. The company's main export markets are Ukraine (17% share) and Germany (13% share) followed by Turkmenistan (11%), Russia and Saudi Arabia (each with a 7% share) as of 2012.

*Syria was a strong market for the company before the political turmoil...*

Royal plans to strengthen its share in existing markets, in addition to adding new ones to the portfolio. One significant area of potential on that front would be the revival of the Syrian operation. Royal had tapped the market right before the start of the political troubles in the country through a local wholesaler, having generated US\$0.7mn revenues in the first year of operation alone. Obviously, sales were subsequently put on hold due to the prevailing political turmoil. Yet should the country achieve political stability in the near term, we believe that Royal Hali could resume its operations there. Indeed, the country would probably offer even higher prospects, when considering the urgent need for residential reconstruction. Situated at Turkey's border to Syria, we note that Gaziantep is closer to Syria than it is to Istanbul, which is a positive factor for logistics.

Royal is also monitoring Iran, Tunisia, Algeria, Morocco and Latin America markets for potential sales activities. Entry barriers are considerable in said regions due to high customs tariffs, but the company believes in the lucrative potential of these markets. Note that Royal has agreed with several dealers to tap the Tunisian and Brazilian markets, albeit with limited deliveries at the outset, simply to test the ground and familiarize itself with local consumer trends and business principals.

*Demand from Europe, the core market of Royal BCF, is expected to grow going forward*

#### **Royal BCF seeking to benefit from expected growth in European market**

Royal BCF is an almost wholly export oriented business, with Europe making up 90% of its total exports. The company is one of the main raw material suppliers of global carpet producers in the region, such as Balta, Associated Weavers and Beaulieu of Belgium, Condor and Betap of the Netherlands and Regency of UK. Previously, European carpet producers had met the bulk of their yarn need from their own production facilities, but increasingly started to direct their purchases to third parties, which provide more affordable prices at the same quality levels. This trend further accelerated with the recent economic turmoil as carpet producers chose to shut down their yarn capacities to save on personnel costs and maintenance/investment expenses. We note that yarn production is a continuous process (i.e. 7/24) - it is hard to persuade European workers to work long hours, this is why producers are decreasingly interested in carrying out production.

Royal BCF expects all remaining yarn capacity in Europe (estimated at around 50k tons/y) to be shut down when the economic lifespan of the production machinery expires, probably within the next 5 years, and all remaining demand to be directed to third parties. Royal BCF stands as a major candidate to benefit from this additional demand, thanks to the

established strong relationship with its clients, proven high-quality production and close proximity of Turkey to Europe (thus easier logistics).

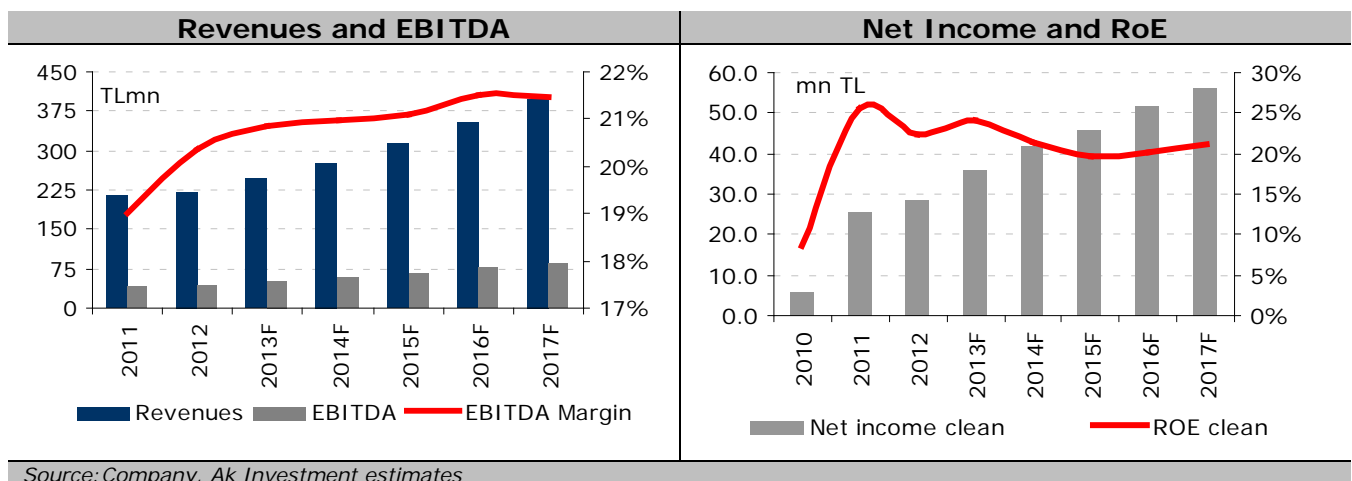
#### Potential to expand yarn portfolio with polyamide and polyester...

Royal BCF is currently evaluating investment plans to add higher margin polyester and polyamide yarns to its production portfolio upon growing demand from its clients. Should this materialize, the diversified product mix, particularly through such higher value added products, may contribute to company figures. Plus, this investment would pave the way for Royal Hali to start producing polyamide and polyester carpets, thus product diversification also at the carpet side.

*Addition of polyamide and polyester to the yarn production mix would contribute to the figures*

#### Financial performance has picked up substantially since 2010

Royal's total revenues stood at TL222.5mn in 2012, implying a 31% CAGR in 2006-2012. Growth was driven by the carpet segment with 37% CAGR, while the yarn segment posted 24% CAGR. Royal Hali recorded 2.03mn sqm of carpet sales and 16.2k tons of yarn sales in 2012 – these figures imply 16% CAGR in 2006-2012 for both segments. Moreover, the company recorded 19.0% and 20.4% EBITDA margins in 2011 and 2012, the highest figures of its history. This was primarily thanks to success achieved with the new strategy launched in 2011 (namely prioritizing profitability over volumes in the carpet segment) and value addition created through innovation in design and R&D.



Royal Hali managed to increase its net income from TL1.2mn in 2006 to TL41.9mn in 2012. The company has seen its bottom-line go into the red twice in the past seven years, in 2008 and 2010: while the former stemmed from FX losses, the latter was due to a one-off provision expense. Net income figures adjusted for FX losses/gains and one-off gains imply an average RoE of 19% in 2010-12.

**We foresee 13% CAGR at top-line and EBITDA in 2012-17F**

Top-line growth will be driven mainly by volume growth (10% CAGR in 2012-17F). We foresee a slight change in the revenue balance between the carpet and yarn segments in favor of the former. We model the EBITDA margin hovering at 20-21% over the next five years. Our estimates point to 13% CAGR in clean net income and an average 21% RoE (clean) in 2012-17F.

**The company promises to become a significant dividend bet in BIST**

Royal Hali management intends to pay at least 80% of its distributable profit as cash or share dividends from 2013 operations followed by at least 50% payout from 2014 and 2015 operations. On our current estimates, an 80% cash dividend payout from 2013 implies 10% dividend yield at current prices.

**IPO proceeds are being used to finance operational expansion.**

*Royal raised TL44.5mn  
from its IPO*

With the IPO launched on May 3, a total of TL44.5mn (c.EUR19mn) was injected to Royal Hali. Part of the proceeds was used in the capacity investments of both the carpet and yarn segments: the company has purchased 4 new looms (2 already operational, 2 on the way) and 1 new yarn production line (came on stream in May). The total cost of these machines amounted to EUR6.2mn (TL14mn). The remainder of the IPO proceeds will be used to fund the sales network expansion, new showroom openings (c.TL2mn for 2013) and working capital requirements.

Note that currently %28.75 of Royal's paid in capital is free floating while the remainder is divided between Naksan Holding (46.25%) and Nakiboglu family members (25.0%).

**RISKS**

- The carpet and rug industry is cyclical and demand depends on the pace of housing activity, such as new construction and remodeling. In that context, carpet demand is tied to economic growth, as well as being sensitive to the level of consumer income, corporate spending and interest rates.
- The costs of the main raw materials, acrylic and polypropylene, is a main determinant of Royal Hali's profitability, and thus oil price volatility (these materials are oil derivatives) would impact the figures in both directions.
- Potential increase in competition.



## VALUATION

We base our valuation for Royal Hali on DCF analysis, which has yielded a target equity value of TL408mn, i.e. TL6.80/share target price with 65% upside potential. We refrain from comparing multiples with the global peer group due to significant differences in size and production portfolios, but we however note that at 4.8x 2013F - 4.1x 2014F EV/EBITDA, and 7.6x 2013F – 6.4x 2014F P/E, Royal Hali currently trades at over 40% discount to peer median. At our target, Royal Hali would be trading on 6.8x 2014 EV/EBITDA and 10.5x 2014 P/E multiples, which would be still undemanding when compared to the peer median of 6.8x and 11.2x, respectively.

### DCF valuation

*Our WACC hovers  
around 11.2%*

Our DCF valuation is based on our forecasts for a ten year period (2013-2022). On a TL cost of equity of 11.5%, a cost of debt of 8%, 1.0 beta and average 6%/94% debt-equity ratio, we reach a WACC in the range of 11.0-11.2% for our analysis. Our terminal growth rate is 5.0%.

For the sake of simplicity, we did not include the downstream business of Atlas Hali A.S. in our valuation, where Royal has a 51% stake (acquired for TL2.5mn at end-2012). Atlas branded carpets are produced by Royal Hali and sold to Atlas Hali A.S, which in turn conducts the sales of the products to end-clients through its dealer network. The Atlas brand was acquired by the group in 2010 and re-launched in the market in 2012; i.e. the business is still at the start-up phase. Atlas Hali A.S. is using a direct distribution model without any wholesaler in between the production and sales point. The success of the model would provide upside to Royal's EBITDA margin – at this stage, we tend to treat the prospect as an upside risk for valuation.

### Discounted Cash Flow (TLmn)

	'13F	'14F	'15F	'16F	'17F	'18F	'19F	'20F	'21F	'22F
<b>Operating Profit (EBIT)</b>	<b>40</b>	<b>47</b>	<b>53</b>	<b>59</b>	<b>67</b>	<b>74</b>	<b>82</b>	<b>88</b>	<b>94</b>	<b>100</b>
(+) Depr. & Amort	11	12	14	16	18	20	22	24	26	28
(-) Taxes on EBIT	8	9	11	12	13	15	16	18	19	20
(-) Increase in NWC	14	13	12	13	15	18	21	24	27	30
(-) Capital Expenditures	25	19	24	21	24	27	21	22	23	24
<b>FCF</b>	<b>4</b>	<b>17</b>	<b>21</b>	<b>30</b>	<b>33</b>	<b>35</b>	<b>46</b>	<b>49</b>	<b>52</b>	<b>55</b>
WACC (%)	11.0%	11.1%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%	11.2%
Discount Factor	1.06	1.17	1.31	1.45	1.62	1.80	2.00	2.22	2.47	2.75
<b>Discounted FCFs</b>	<b>4</b>	<b>15</b>	<b>16</b>	<b>21</b>	<b>20</b>	<b>19</b>	<b>23</b>	<b>22</b>	<b>21</b>	<b>20</b>
PV of FCFs (2013-2022)	181									
PV of Terminal Val.@ 5% Gr.	209									
Net Cash/(Debt) end-2012	18									
<b>Equity Value</b>	<b>408</b>									

Source: Ak Investment Estimates net cash is adjusted with the IPO proceeds of TL44.5mn

We present a sensitivity analysis of our DCF model to terminal growth rate and WACC.

### DCF Equity Valuation Sensitivity Analysis

		WACC				
Terminal growth rate	TLmn	Base+2pps	Base+1pp	Base	Base-1pp	Base-2pps
	4.0%	302	335	377	432	507
	4.5%	310	346	392	453	540
	5.0%	318	357	<b>408</b>	478	579
	5.5%	328	370	427	508	630
	6.0%	338	386	450	545	696

Source: Company data, Ak Investment

### Multiples

We provide below the multiples of selected global carpet producers.

*Our set of global peers trade at 8.0x 2013F EV/EBITDA*

### Multiples - International Peers

Company	Mcap US\$m	EV/EBITDA		P/E	
		2013F	2014F	2013F	2014F
Oriental Weavers	278	5.9	6.0	6.2	4.7
Mohawk Inc.	7,963	10.0	8.4	19.1	15.5
Interface	1,109	9.8	7.5	22.6	15.8
Cavalier	91	6.3	5.3	8.6	6.8
<b>Median of peers</b>		<b>8.0</b>	<b>6.8</b>	<b>13.8</b>	<b>11.2</b>
<b>Royal Hali</b>		<b>4.8</b>	<b>4.1</b>	<b>7.6</b>	<b>6.4</b>

Source: Bloomberg, Thomson Reuters, Ak Investment Estimates

### Comparison of selected figures with peers (2012, US\$m)

	<u>Mohawk Indust.</u>	<u>Oriental Weavers</u>	<u>Interface</u>	<u>Cavalier</u>	<u>ROYAL HALI</u>
Country	USA	Egypt	USA	N. Zealand	Turkey
Revenues	5,788	701	932	173	124
EBIT	398	46	86	4	20
EBIT margin	6.9%	9.6%	9.2%	2.3%	16.2%
EBITDA	677	79	116	10	25
EBITDA margin	11.7%	11.3%	12.4%	5.8%	20.4%
Net income	262	39	39	3	23
Net inc.margin	4.5%	5.6%	4.2%	1.7%	18.8%

Source: Bloomberg, Company



## FINANCIAL ANALYSIS

In this section, we present our analysis on the company's reported financial statements for the past three years. Note that there are three crucial issues to consider that have distorted the EBITDA and bottom-line figures of the company in the 2010-2012 period:

- 1) the TL15.3mn provision set aside for doubtful provisions in 2010
- 2) the substantial amount of FX losses in 2011, and FX gains in 2012
- 3) the TL5.5mn net income generated from a real estate sale in 2012

We present both the reported and cleaned figures to smooth-out the distortions and provide a better platform for comparison. Please refer to the relevant headers in the section for detailed information.

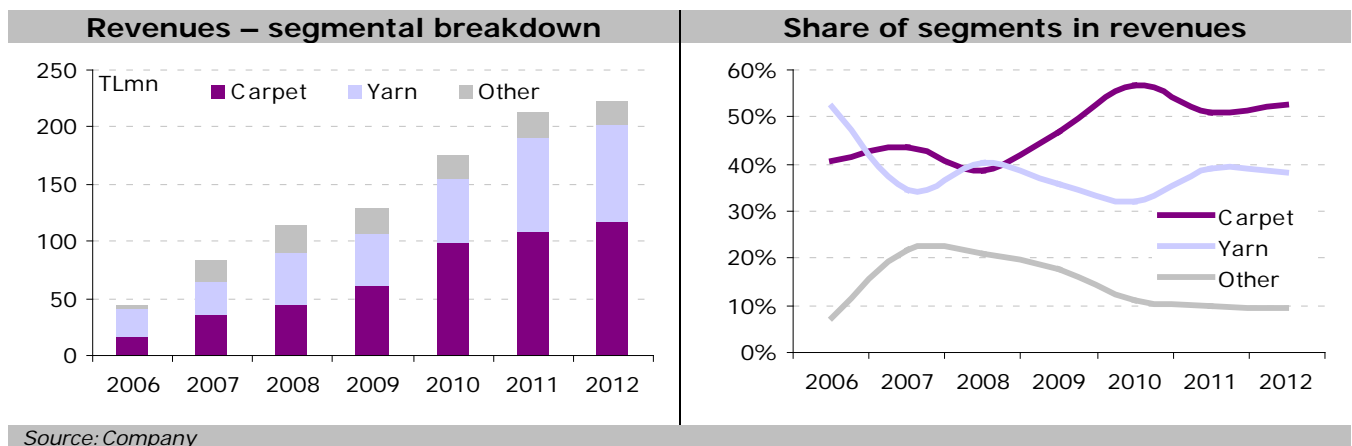
Financial Summary (P&L)			
<b>TLmn</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Revenues</b>	<b>174.9</b>	<b>212.1</b>	<b>222.5</b>
<b>Gross profit</b>	<b>36.6</b>	<b>56.7</b>	<b>65.5</b>
<i>Gross margin</i>	20.9%	26.7%	29.4%
<b>EBITDA</b>	<b>6.9</b>	<b>40.3</b>	<b>45.4</b>
<i>EBITDA margin</i>	3.9%	19.0%	20.4%
<b>Net Income</b>	<b>-7.0</b>	<b>2.5</b>	<b>41.9</b>
<i>Net Income margin</i>	-4.0%	1.2%	18.8%
<b>One offs</b>			
Op-ex: provisions for doubtful receivables	-15.3	-	-
other inc.: income from real estate sale	-	-	5.7
FX gains / (losses)	-0.7	-23.2	7.7
<b>EBITDA (clean)</b>	<b>22.2</b>	<b>40.3</b>	<b>45.4</b>
<i>EBITDA margin (clean)</i>	12.7%	19.0%	20.4%
<b>Net income (clean)</b>	<b>5.9</b>	<b>25.7</b>	<b>28.5</b>
<i>Net income margin (clean)</i>	3.4%	12.1%	12.8%
<b>RoE(Clean)</b>	<b>8.6%</b>	<b>25.5%</b>	<b>22.4%</b>
Revenue growth	34.9%	21.3%	4.9%
EBITDA growth (clean)	-1.8%	81.9%	12.5%
Net income growth (clean)	-58.4%	332.7%	11.1%
Source Company, Ak Investment			

*Carpet and yarn segments made up 53% and 38% of revenues in 2012*

## Revenues

Royal's total revenues stood at TL222.5mn in 2012, implying a 31% CAGR between 2006-2012. Growth was driven by the carpet segment (37% CAGR in 2006-2012), which had kicked off its operations in 2006, while the yarn segment posted 24% CAGR. Carpet and yarn segments made up 53% and 38% of revenues in 2012. We note that the carpet business is mainly domestic oriented (80% of revenues in 2012), while the yarn business is export oriented (91% of revenues in 2012). The combination of the two segments provides Royal Hali with a healthy domestic-exports balance (49%-51% in 2012). Exports are mainly performed in EUR terms.

We note that the company also occasionally trades carpets and other home textile products purchased from third parties to complement its product portfolio, and makes some raw material sales. The revenues generated through these activities are classified in a third segment called "other revenues". Other revenues made up 9% of total revenues in 2012. Other revenues also grew by 30% in 2006-2012, despite remaining stable over the past 3 years. This segment has a negligible contribution to total EBITDA.

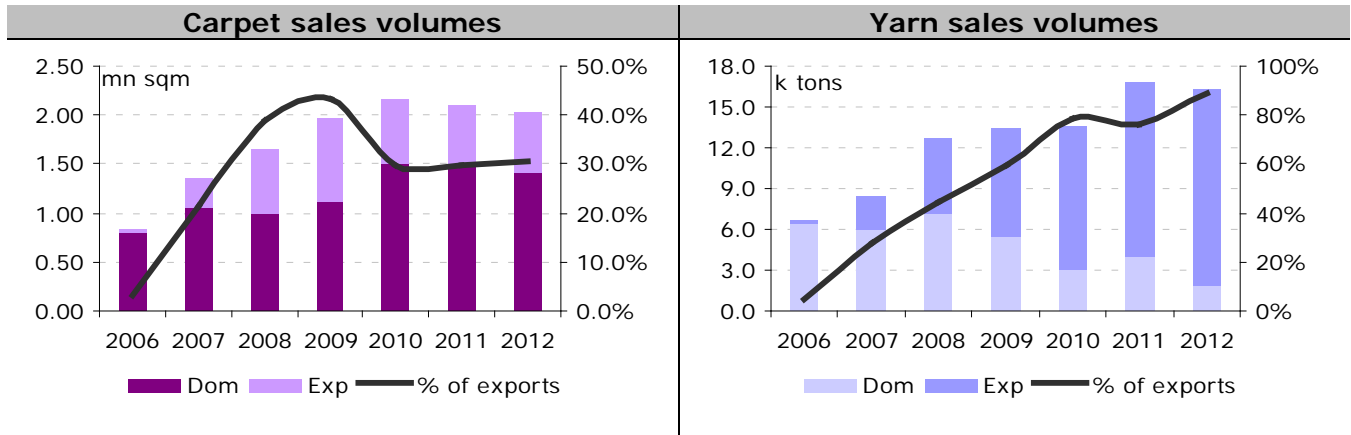


Royal Hali recorded 2.03mn sqm of carpet sales and 16.2k tons of yarn sales in 2012 – these figures imply 16% CAGR in 2006-2012 for both segments. In carpet, exports have made up c.30% of volumes over the past three years, declining from 43% in 2009. Royal's export volumes have posted declines parallel to the global economic turbulence in Europe, as well as political turbulence in the MENA region in the aftermath of the "Arab Spring". Yet this has not been the case for yarn volumes, which continued to post double-digit growth rates in export sales: during the economic crisis, European carpet producers switched a higher portion of their raw material purchases to low cost countries and shut down a portion of their own yarn capacities, which proved beneficial for Royal BCF.

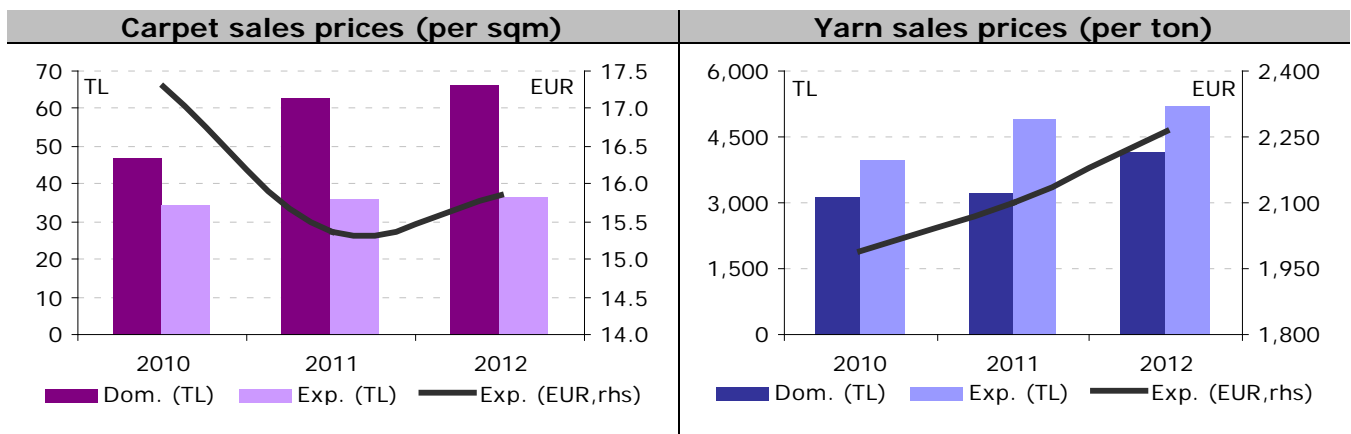
*Company made a strategic move two years ago and shifted its focus on improving its profitability*

Royal's domestic carpet volumes stayed flat in the past two years, which resulted from a strategic company decision to focus on profitability in order to heal its leveraged balance sheet at that time. Accordingly, the company made a notable increase in its carpet sales prices and switched its marketing focus more to design and quality. The fact that volumes remained stable, despite a 40% increase in average unit price, implies that consumer reaction was not negative.

For the yarn segment, there was a decline in domestic volumes as a result of the company's strategy of fully dedicating its capacity to foreign clients. Royal BCF management is pleased with the professional business principals and corporate management structures of its global clients, which provide the company with higher visibility and efficient production planning compared to the volatile order streams, longer payment terms and relatively higher payment risk of local producers.



Source: Company



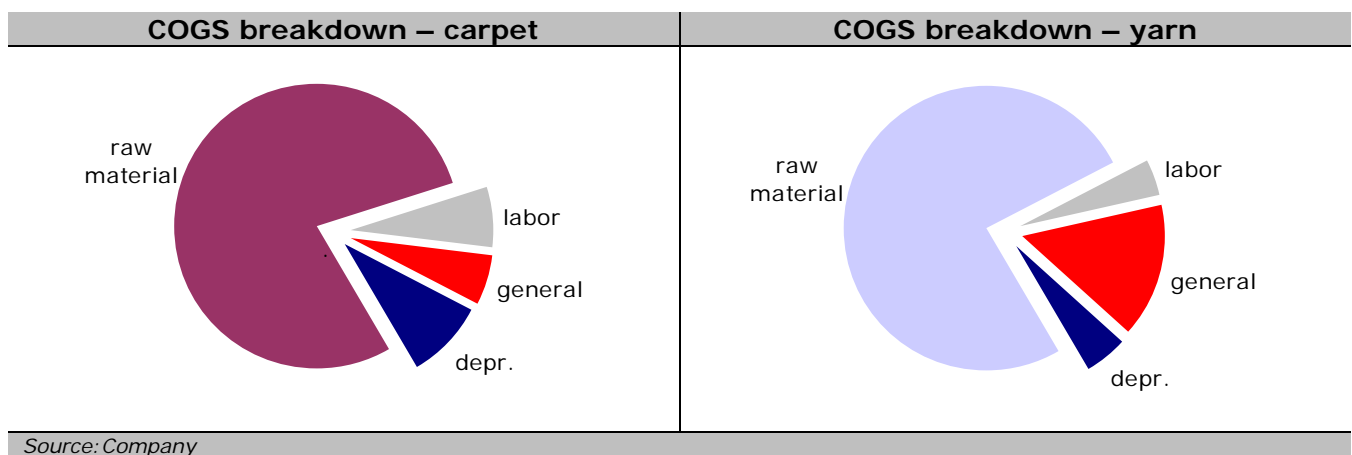
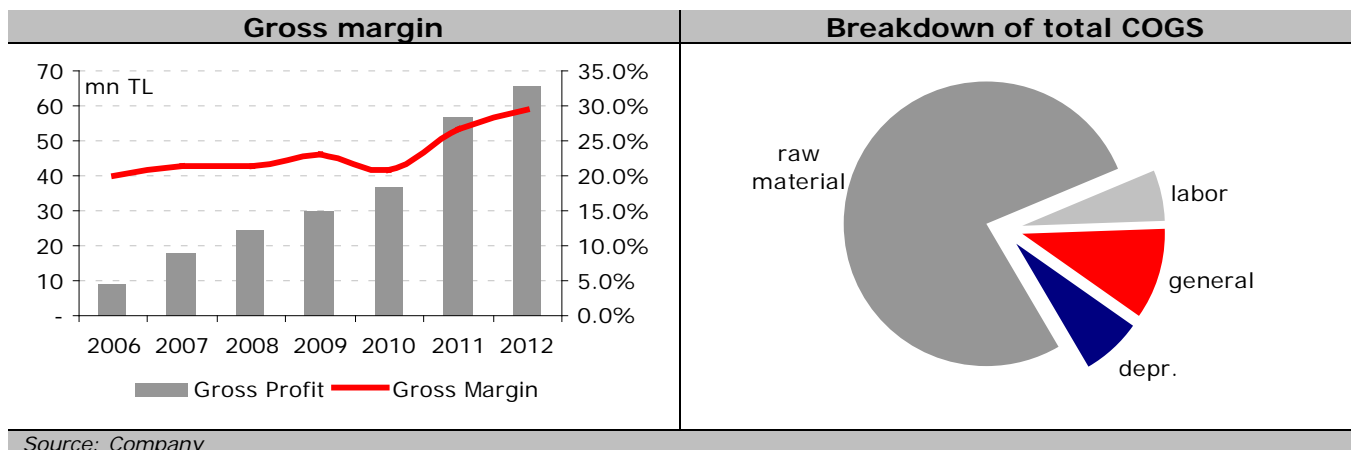
Source: Company

*Both carpet and yarn production are capital intensive*

## Costs

In COGS, the major item is raw material costs, which constitutes around 75-80% of direct production costs. The company uses acrylic fiber and polypropylene as the main inputs in production, which renders it sensitive to commodity prices (oil and naphtha). Raw material costs are linked to US\$. General expenses including energy and electricity costs make up c.10% of direct costs – this item is mainly driven by the yarn segment, where production is a continuous process by nature (the plant works 24/7). Carpet and yarn production is largely capital intensive, and thus the share of labor cost in direct costs is low, at 5%, while depreciation makes up 7%.

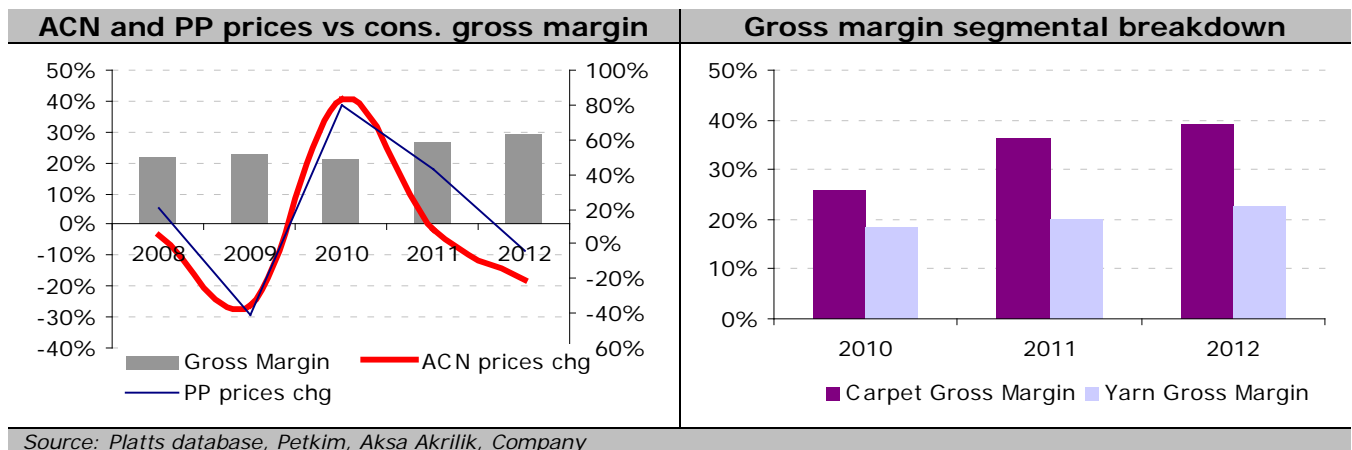
Royal Hali posted a steady uptrend in its gross margin between 2006-2012 from 20.0% to 29.4%, with the exception of 2010, when raw material prices saw a massive spike (+83% in acrylic (ACN), +38% in PP). The improvement in gross margin was particularly visible in 2010-2012, as the company's strategy of prioritizing profitability over volumes in the carpet business paid-off well.



*Raw material costs are linked to US\$*

**Raw material:** The company uses acrylic fiber, which is procured from local producers, as the main input in carpet production. The price of acrylic fiber evidently depends on acrylic prices – Royal’s yarn suppliers make their acrylic purchases mostly from Aksa Akrilik (AKSA TI), a Turkish chemicals company that owns the largest acrylic production capacity at a single premise globally, and partly from foreign producers. In yarn production, the main input is polypropylene (PP), which is purchased mainly from abroad. Petkim, the largest petrochemicals company in Turkey, produces PP, albeit in limited amount, which thus fails to meet Turkey’s overall demand.

One advantage of the yarn business is that the company negotiates with its clients on a “cost plus” pricing basis and reflects the increases in PP prices to sales prices. The PP prices are followed through the ICIS database. This provides the company a hedge against volatility in PP prices, enabling the segment to maintain its gross margin.



Source: Platts database, Petkim, Aksa Akrilik, Company

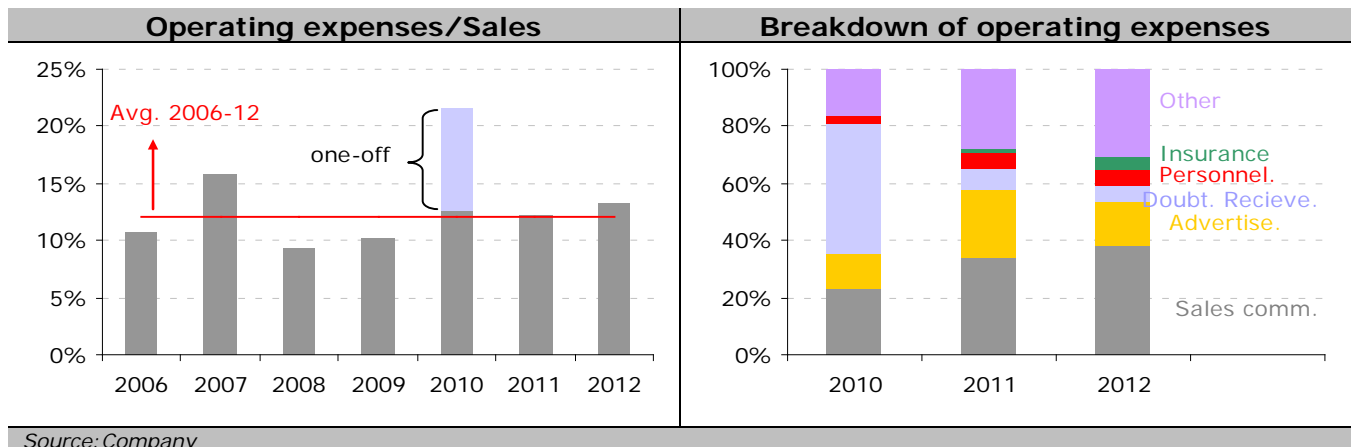
**Labor:** The company employed 606 personnel in 2012, with a 64%/36% split between carpet and yarn segments. We note that the share of labor in total costs might have been even lower - both businesses are capital intensive - but for the fact that yarn production characteristically requires continuous production, thus three shifts a day, and that the carpet plant also switches to three shifts a day at high seasons (2Q and 4Q), labor costs tend to go higher.

## Operating Expenses

*Operating expenses amounted to 13.3% of sales on average in the 2006-2012 period*

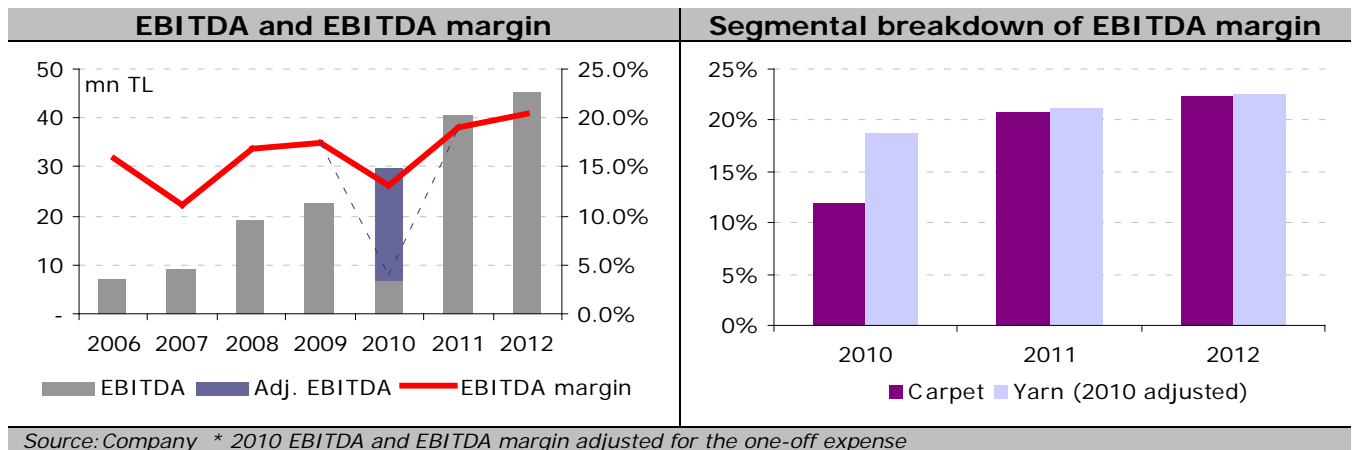
The company’s operating expenses amounted to 13.3% of its sales revenues on average in the 2006-2012 period. This ratio saw a minimum of 9.3% in 2008 and maximum of 21.7% in 2010, although the latter was inflated due to a one-off record stemming from the TL15.3mn provision set aside for doubtful receivables. The bad debt was owned by a local client of the yarn business. Adjusted for that figure, the Opex/Sales ratio declines to 12.6% for 2010, and the average for the 2006-2012 period accordingly slides to 12.0%. In total

operating expenses, sales commissions and advertising make up the largest shares.



*EBITDA margin averaged at 14.9% in 2006-2012*

Royal Hali's EBIT and EBITDA margins averaged at 10.0% and 14.9% in 2006-2012, respectively. Had the 2010 figures not been depressed by the aforementioned TL15.3mn doubtful receivable, the six-year averages would have been 11.3% for EBIT and 16.2% for the EBITDA margin. We note that the company recorded 19.0% and 20.4% EBITDA margins in 2011 and 2012, marking the highest figures of its history. This was primarily thanks to success achieved in the new strategy launched in 2011 (prioritizing profitability over volumes in the carpet segment).



### Other and financial income/expense

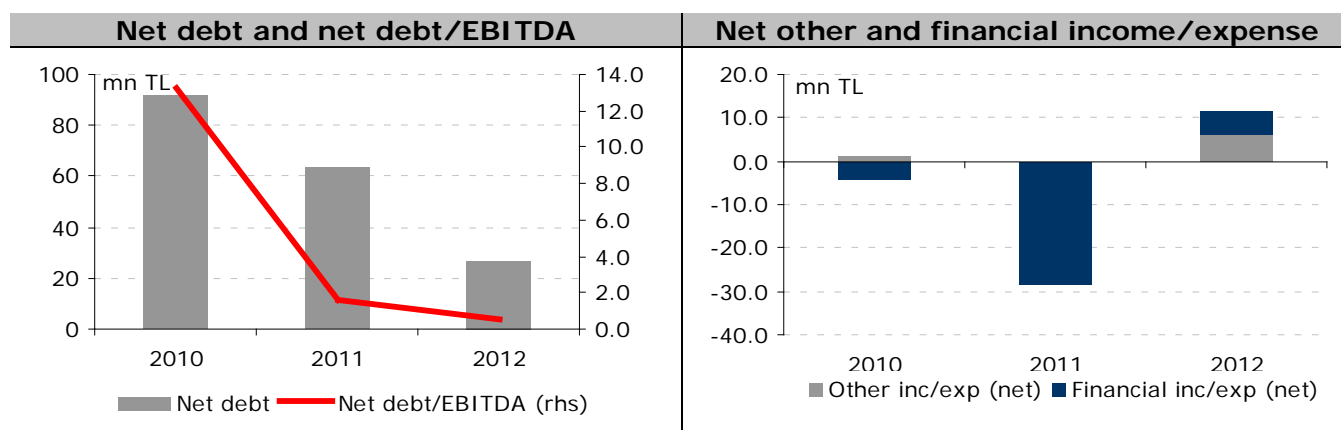
Royal Hali's net other income has not reached substantial amounts that could affect the bottom-line result, with the exception of 2012, when the company recorded a TL5.7mn gain from a real estate sale.

Financial income/expenses, on the other hand, have been quite effective on the P&L result. The company formerly operated at high leverage, particularly until 2011 (with an average net debt/EBITDA ratio of 5.3x in adjusted terms), in order to finance its capacity expansion and working capital needs during

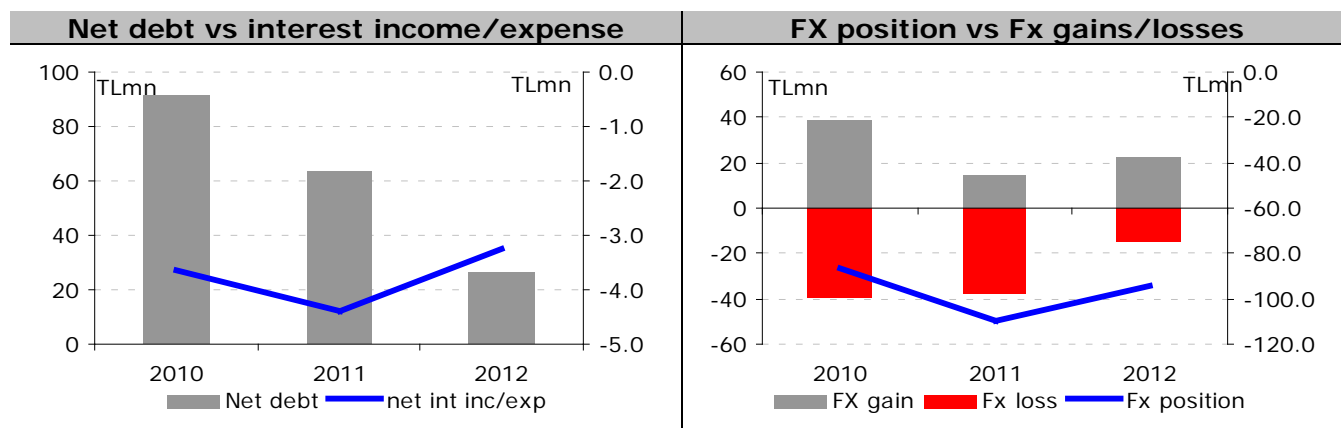
its growing penetration of the market. Accordingly, the company recorded high interest expenses in due course. The interest income/expense line also includes the interest generated, or paid from receivables and to payables.

*Royal deleveraged its balance sheet substantially over the years*

We note that the loans were mainly denominated in FX terms – thus the company has carried a high short FX position so far, which has led to the creation of FX gains or losses in times of FX rates volatility (i.e. in the 2007-2008, and 2011-2012 periods). The company reduced its leverage after focusing on profitability and cash generation starting in 2011, whereby net debt/EBITDA slid down to 0.59x at end-2012. Note that the sale of the real estate in 2012 also assisted de-leveraging, given the TL17mn cash inflow.



Source: Company \* 2010 EBITDA adjusted for the one-off expense



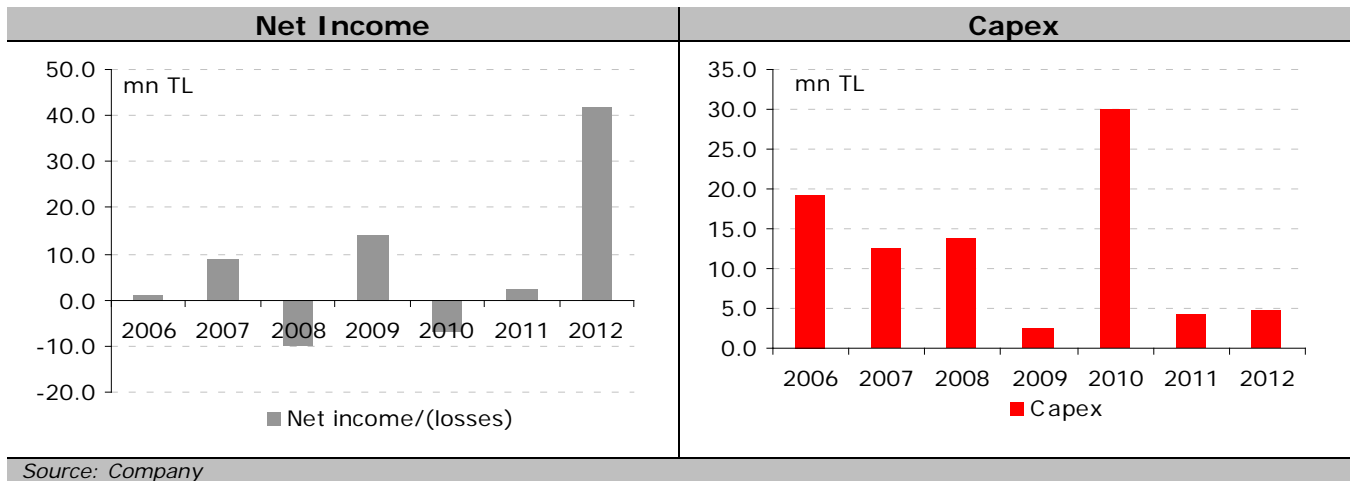
Source: Company

### Net Income

Royal Hali managed to increase its net income from TL1.2mn in 2006 to TL41.9mn in 2012. The company has seen its bottom-line enter the red zone twice in the past seven years, namely 2008 and 2010: the former was primarily due to recorded high FX losses, and the latter to a one-off provision expense.

Meanwhile, the income from real estate sales and FX gains was also effective in the high net profit posted in 2012. Moreover, the company has benefited

from low effective tax rates over the past two years (5.6% in 2011 and 11.5% in 2012), thanks to the received investment incentives.



### Capex

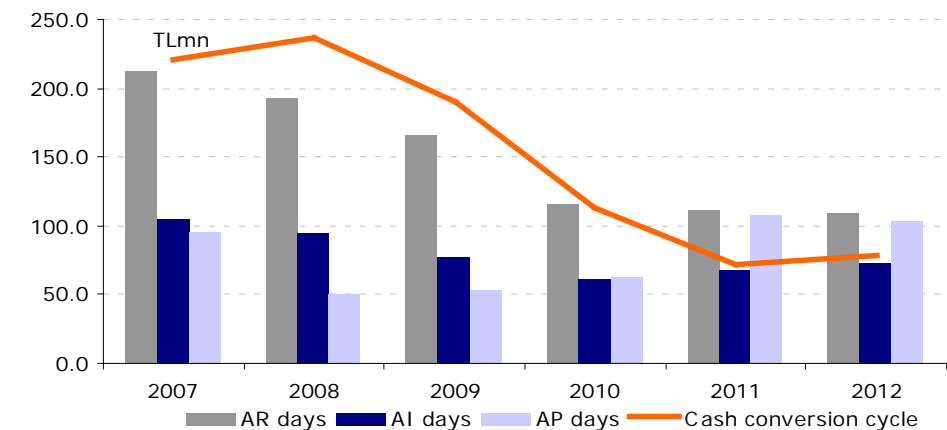
*Royal Hali's total investments amounted to 12% of its revenues on average in the 2006-2012 period*

Royal Hali's total investments amounted to 12% of its revenues on average in the 2006-2012 period. Spending was heavily front-loaded, as the company invested in capacity expansions and showroom openings during its market penetration in the carpet segment, and purchased new machinery for yarn production in order to meet growing demand. The spike in the capex figure in 2010 includes the TL10.6mn upfront payment made as the 5 year license fee for Pierre Cardin brand. Investments have been very limited over the past two years apart from showroom openings.

### Cash conversion cycle

The company's average cash conversion days exceeded 200 during the first few years of operation, but showed a notable improvement over the past two years, parallel to a strategic focus shift to cash generation. In 2011 and 2012, cash conversion days were at 72 and 78 days, respectively.

### Cash conversion cycle



Source: Company data, Ak Investment estimates



## 1Q13 Financial Review

### Overview

Royal Hali's 1Q13 revenues stood at TL54mn with 3% YoY growth. Revenue growth was primarily driven by the yarn segment (+13.7% YoY). Gross profit grew by 10% YoY, implying a c.2 pps expansion in gross margin YoY. However EBIT declined by 8% YoY, driven by the negative impact of first time consolidation of Atlas Hali A.S., which was acquired at the beginning of the year (thus it was absent in 1Q12 financials). The related marketing expenses of the carpet segment (37% YoY increase) accordingly depressed the 1Q13 profitability of the company. 1Q13 EBITDA was recorded at TL8.8mn, down 4% YoY, implying 16.2% margin vs. 17.4% a year ago.

*Adjusted for the FX gains/losses, the 1Q13 net income figure points to c.3% YoY growth*

Royal Hali's 1Q13 net profit came in at TL4.9mn vs. TL11.5mn in 1Q12. We remind that last year's bottom-line figure had been inflated by the high net FX gains (stemming from the TL strength) which amounted to a net TL6.6mn, while in 1Q13, the company recorded TL0.2mn net FX losses. Adjusted for the FX gains/losses, the 1Q13 net income figure actually points to c.3% YoY growth.

### Segmental breakdown

**Carpet segment:** Despite a low volume performance (4% YoY decline), the segment's revenues stood roughly flat YoY. First of all, one should note that first two months of the year are generally considered as off season in the carpet business and the producers are generally more focused on the upcoming first campaign period of the year, which kicks-off in March. Hence, it is common to see some volatility in volumes. That said, the company officials asserted that one of the leading main dealers had seen its focus distracted in 1Q13 after having faced with operational difficulty in a non-related business, which came as a drag on volume sales – it is noted that the problem was solved later on, and the said dealer's performance picked up in 2Q. Meanwhile, the key highlight of the release was the negative impact of the first time consolidation of Atlas Hali's sales organization, which is currently on an expansion phase. We note that the number of Atlas Hali sales points increased from 119 at 2012-year end to 142 as of end-1Q13 (and to 190 as of end-May). The related expenses and the marketing efforts led to a pressure on the segment's profitability. As a result, the segment closed the quarter with 14.8% EBITDA margin, compared to 19.8% a year ago.

**Yarn segment:** The segment recorded a hefty 13.7% YoY top-line growth driven both by volumes (+7% YoY) and pricing (6% YoY). Gross margin stood

3.5 pps lower YoY, but this was compensated by the lack of high provisions for doubtful receivables in opex in 1Q13, which depressed the previous year's EBIT (said provisions amounted to TL1.2mn in 1Q12 vs TL0.3mn in 1Q13). In the end, the segment's EBITDA margin reached 21.1% in 1Q13 up from 18.9% a year ago.

**Royal Hali - 1Q13 Financial Results**

(TLmn)	1Q13	1Q12	YoY Chg.
Carpet Sales volumes (k sqm)	486.0	504.0	-3.6%
Yarn Sales volumes (tons)	4,127	3,859	6.9%
Revenues	54.3	52.8	3%
Gross Profit	16.5	15.0	10%
EBIT*	6.3	6.8	-8%
EBITDA*	8.8	9.1	-4%
Net other income/expense	0.25	0.29	-14%
Net financial income/expense	-0.91	6.7	n.m.
Net FX gains/losses	-0.18	6.6	n.m.
Net Profit	4.9	11.5	-57%
<b>Margins</b>			
Gross	30.4%	28.5%	194 bps
EBIT	11.7%	13.0%	-132 bps
EBITDA	16.2%	17.4%	-117 bps

Source: Company, Ak Investment

**Royal Hali - Segmental breakdown (TLmn)**

<u>Carpet segment</u>	<u>1Q13</u>	<u>1Q12</u>	<u>YoY Chg.</u>
Revenues	29.0	29.2	-1%
Gross Profit	12.3	10.6	15%
EBIT*	2.6	4.2	-38%
EBITDA*	4.3	5.8	-26%
<b>Margins</b>			
Gross	42.5%	36.5%	600 bps
EBIT	9.1%	14.5%	-537 bps
EBITDA	14.8%	19.8%	-503 bps
<u>Yarn segment</u>	<u>1Q13</u>	<u>1Q12</u>	<u>YoY Chg.</u>
Revenues	21.6	19.0	14%
Gross Profit	4.2	4.3	-4%
EBIT*	3.7	2.8	33%
EBITDA*	4.6	3.6	27%
<b>Margins</b>			
Gross	19.2%	22.7%	-348 bps
EBIT	17.3%	14.8%	246 bps
EBITDA	21.1%	18.9%	224 bps

Source: Company, Ak Investment

## MODEL FORECASTS

We present our forecasts in the table below. In brief; we expect 10.8% and 9.6% CAGR in respective carpet and yarn production volumes of the company for the 2012-2017 period. For sales volumes, we forecast 9.8% CAGR for carpet and 9.6% CAGR in yarn segments in the same period. In terms of unit prices, we model 4.6% and 3.5% CAGR in carpet and yarn segments respectively in 2012-2017.

In that context our model envisages 12.7% CAGR in revenues in the next five years. We foresee the gross margin of Royal Hali moving higher from 29.4% in 2012 to 31.7% in 2017 – this will mainly be driven by the carpet segment, while we foresee a steadier trend for the yarn segment. Note that we envisage the oil prices flat at US\$108/bbl through our forecast horizon. Overall we foresee 13.4% CAGR in Royal Hali's EBITDA in the 2012-2017 period, with the EBITDA margin moving in a narrow band.

### MODEL ESTIMATES

<b>Macro</b>	<b>2011</b>	<b>2012</b>	<b>2013F</b>	<b>2014F</b>	<b>2015F</b>	<b>2016F</b>	<b>2017F</b>	<b>CAGR 12-17</b>
Real GDP gr.	8.5%	2.3%	4.0%	4.5%	5.0%	5.0%	5.0%	
CPI	6.3%	8.9%	6.7%	6.0%	6.0%	6.0%	6.0%	
<b>Carpet prod (mn sqm)</b>	<b>2.2</b>	<b>1.9</b>	<b>2.2</b>	<b>2.5</b>	<b>2.7</b>	<b>3.0</b>	<b>3.2</b>	<b>10.8%</b>
<b>Yarn prod (k tons)</b>	<b>17.1</b>	<b>16.4</b>	<b>19.0</b>	<b>20.5</b>	<b>22.4</b>	<b>24.1</b>	<b>25.9</b>	<b>9.6%</b>
<b>Company</b>	<b>2011</b>	<b>2012</b>	<b>2013F</b>	<b>2014F</b>	<b>2015F</b>	<b>2016F</b>	<b>2017F</b>	<b>CAGR 12-17</b>
<b>Carpet vol. (mn sqm)</b>	<b>2.1</b>	<b>2.0</b>	<b>2.2</b>	<b>2.5</b>	<b>2.7</b>	<b>3.0</b>	<b>3.2</b>	<b>9.8%</b>
YoY growth	-2.0%	-3.9%	10.0%	11.9%	9.4%	8.9%	8.9%	
Domestic	1.5	1.4	1.6	1.7	1.9	2.1	2.4	10.8%
Export	0.6	0.6	0.7	0.8	0.8	0.8	0.9	7.3%
<b>Yarn vol. (k tons)</b>	<b>16.8</b>	<b>16.2</b>	<b>18.1</b>	<b>20.3</b>	<b>22.2</b>	<b>23.8</b>	<b>25.6</b>	<b>9.6%</b>
YoY growth	24.1%	-3.6%	11.8%	11.9%	9.3%	7.5%	7.5%	
Domestic	2.0	1.8	1.9	1.9	1.9	2.0	2.0	2.0%
Export	14.8	14.4	16.3	18.4	20.2	21.9	23.6	10.4%
<b>Carpet Unit price</b>	<b>55</b>	<b>57</b>	<b>60</b>	<b>63</b>	<b>65</b>	<b>68</b>	<b>72</b>	<b>4.6%</b>
Domestic (TL/sqm)	63	66	70	73	76	79	82	4.3%
Export (EUR/sqm)	15	16	16	16	16	16	16	0.6%
<b>Yarn Unit price</b>	<b>4,703</b>	<b>5,099</b>	<b>5,097</b>	<b>5,213</b>	<b>5,414</b>	<b>5,709</b>	<b>6,047</b>	<b>3.5%</b>
Domestic (TL/ton)	3,207	4,168	4,043	4,043	4,124	4,124	4,124	-0.2%
Export (EUR/ton)	2,101	2,264	2,196	2,196	2,240	2,285	2,319	0.5%

Source: Company, Ak Investment Estimates

**MODEL ESTIMATES**

<b>P&amp;L statement</b>	<b>2011</b>	<b>2012</b>	<b>2013F</b>	<b>2014F</b>	<b>2015F</b>	<b>2016F</b>	<b>2017F</b>	<b>CAGR 12-17</b>
<b>Revenues (TLmn)</b>	<b>212</b>	<b>222</b>	<b>250</b>	<b>284</b>	<b>319</b>	<b>359</b>	<b>405</b>	<b>12.7%</b>
YoY growth	21.3%	4.9%	12.2%	13.7%	12.3%	12.1%	12.7%	
Carpet	109	117	135	156	177	200	228	14.3%
Yarn	82	85	94	107	122	138	156	13.0%
Other	21	21	21	21	21	21	21	0.0%
<b>Gross profit (TLmn)</b>	<b>57</b>	<b>65</b>	<b>77</b>	<b>88</b>	<b>100</b>	<b>113</b>	<b>128</b>	<b>13.7%</b>
Gross Margin	26.7%	29.4%	31.0%	31.1%	31.3%	31.6%	31.7%	
Carpet gross margin	36.5%	39.2%	41.3%	41.4%	41.4%	41.6%	41.5%	
Yarn gross margin	20.1%	22.5%	22.4%	21.5%	21.5%	21.3%	21.3%	
Other gross margin	2.9%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	
<b>EBITDA (TLmn)</b>	<b>40</b>	<b>45</b>	<b>51</b>	<b>59</b>	<b>67</b>	<b>75</b>	<b>85</b>	<b>13.4%</b>
YoY growth	484.0%	12.3%	12.6%	15.5%	13.7%	12.5%	12.5%	
EBITDA Margin	19.0%	20.4%	20.4%	20.8%	21.0%	21.0%	20.9%	
Carpet EBITDA margin	20.9%	22.3%	21.8%	22.1%	22.1%	21.9%	21.6%	
Yarn EBITDA margin	21.2%	22.6%	22.9%	22.7%	23.0%	22.8%	22.6%	
Other EBITDA margin	1.1%	0.2%	-1.1%	0.2%	0.2%	0.2%	0.2%	
<b>Net Income (TLmn)</b>	<b>2.5</b>	<b>41.9</b>	<b>32.3</b>	<b>38.8</b>	<b>43.8</b>	<b>41.7</b>	<b>49.9</b>	<b>14.3% *</b>
YoY growth	n.m.	1,597%	-23%	20%	11%	-6%	20%	
Net Income Margin	1.2%	18.8%	12.9%	13.7%	13.5%	11.3%	12.0%	

Source: Company, Ak Investment Estimates \*Net income CAGR calculated on clean figures

**CASH FLOW STATEMENT (TLmn)**

	<b>2011A</b>	<b>2012A</b>	<b>2013F</b>	<b>2014F</b>
<b>Net Profit before adjustments</b>	<b>2.5</b>	<b>42</b>	<b>32</b>	<b>39</b>
Depreciation & Amortization	9	9	10	12
Changes in trade receivables	-20	25	-14	-15
Changes in trade payables	32	-46	3	5
Changes in inventory	-5	0	-4	-5
<b>Operating Cash Flow</b>	<b>19</b>	<b>29</b>	<b>27</b>	<b>35</b>
Fixed Capital Investments	-39	19	-25	-19
Cash from other investments	1.8	1.9	0	0
<b>Cash from Investments</b>	<b>-37</b>	<b>21</b>	<b>-25</b>	<b>-19</b>
Taxes payable and other	0	-9	0	0
<b>Free Cash Flow</b>	<b>-18</b>	<b>50</b>	<b>2</b>	<b>16</b>
Change in Financial Debt	-28	-36	-0.4	-6
Dividend Payments	0	0	0	-26
Capital Increase	13	3	44.5	0.0
Cash from other financing operations	0	0	0	0
<b>Cash from financing</b>	<b>-15</b>	<b>-33</b>	<b>44</b>	<b>-32</b>
Change in cash & equivalents	0	1	-3	30
Other cash inflow / outflow	34	-18	0.2	15
<b>End of period cash balance</b>	<b>0.9</b>	<b>1.7</b>	<b>43.0</b>	<b>28.0</b>

Source: Company, Ak Investment Estimates

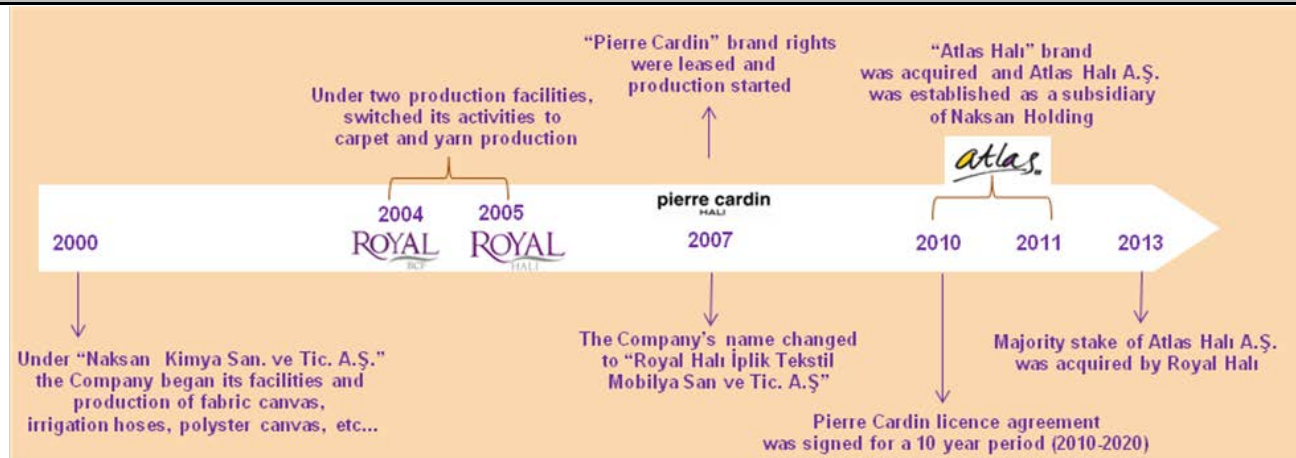
*Royal Hali's entered the carpet production in 2005*

## THE COMPANY

Royal Hali was founded in Gaziantep in 2000 as a subsidiary of Naksan Holding. The company was initially named "Naksan Chemical", and was involved in the production of woven canvas, big-bag, PVC coated polyester canvas, irrigation hoses, etc. It switched to PP yarn production in 2004, and added carpet production as a second business line in 2005, after which it changed its name to Royal Hali. Carpet production is carried out under the Royal Hali name, while yarn production is carried out under the name of Royal BCF.

Royal Hali produces and sells its carpets under three brands, namely Royal, Pierre Cardin and Atlas Hali. Royal brand was created from the scratch by the company. The Pierre Cardin brand rights were initially leased on 2007 and the agreement was extended for a 10 year period in 2010. The Atlas Hali brand was acquired by Royal Hali at end-2010. Atlas Hali's operations are carried out under a separate company "Atlas Hali A.S.", which was initially established by Naksan Holding. Royal Hali acquired the majority stake of this company as of January 2013 – Atlas Hali A.S. is now fully consolidated under Royal Hali.

### Milestones



Source: Company

Royal Hali has one carpet production plant, while Royal BCF has one yarn manufacturing plant, both being situated in Gaziantep. The carpet plant spans a c.85k sqm area and has 21 carpet weaving looms in operation, including the 2 new looms installed recently. The yarn plant spans a c.12k sqm area with c.20.4k tons/y PP yarn production capacity at 6 lines, including the one new machine that was purchased recently. PP yarn is mainly used for carpet production. However, we note that Royal Hali uses acrylic fibers as the main input for its products with only a negligible portion of the PP yarn

produced by the company's yarn plant being consumed internally. Thus, nearly all of the production is sold to third parties, mainly abroad.

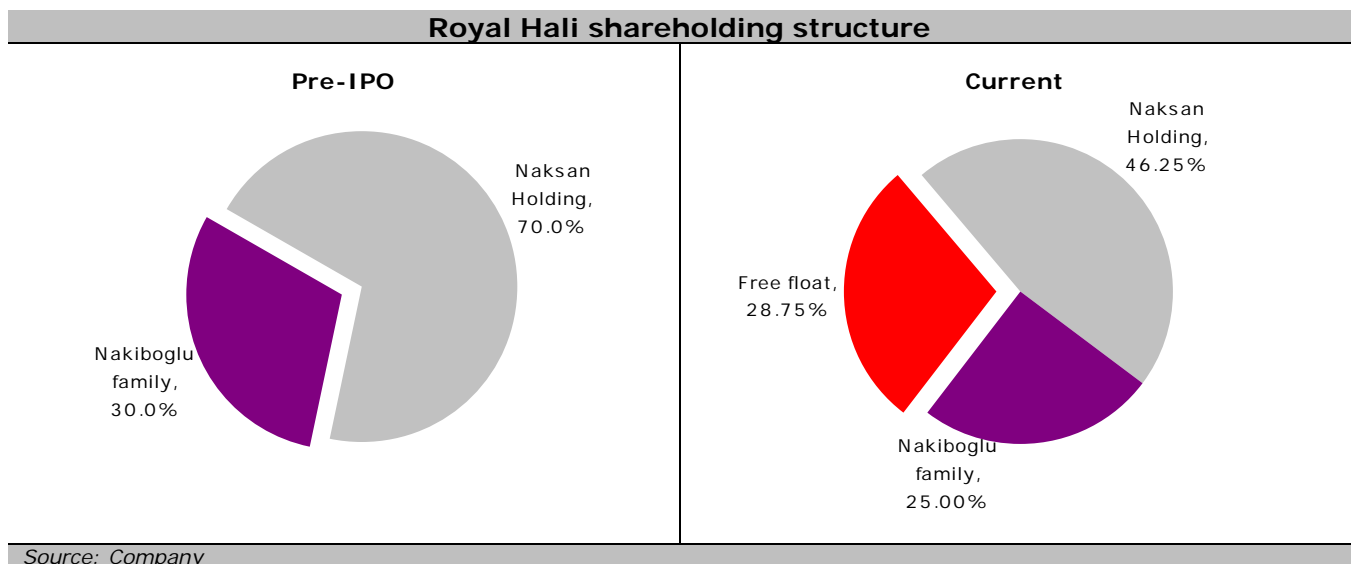
Royal Hali generated total revenues of TL175mn, TL212mn and TL222.5mn in 2010, 2011 and 2012, respectively. Carpet revenues made up 52% of total revenues on average in the three year period, whereas the share of yarn sales was on average at 36%. Other revenues, which consist of income generated from the of raw materials and traded goods produced by third parties, made up an average 13% of total sales in 2010-12. The share of exports is 20% for the carpet, and 91% for the yarn segment.

*Royal Hali ranked 413<sup>th</sup> on the "Top 500 companies" list in 2011*

In 2011 Royal Hali ranked 413<sup>th</sup> on the "Top 500 companies" list prepared by the Istanbul Chamber of Industry, whereas Naksan Plastik, the flagship company of the Naksan Group, ranked 128<sup>th</sup>.

### Shareholder Structure

The major shareholder of Royal Hali is Naksan Holding with a 70% stake. Naksan Holding is owned by the Nakiboglu family, one of the leading names in Gaziantep. The remainder shares of Royal Hali are owned by Nakiboglu family members. Naksan Holding is among the leading industrial groups in Turkey, having concerns in energy (thermal PP), plastics, textile, technology, and consumer retail (distributor of Apple products in the Gaziantep region), alongside yarn and carpet production.



## OVERVIEW OF THE CARPET SEGMENT

*Total number of looms will be 27 in 2013*

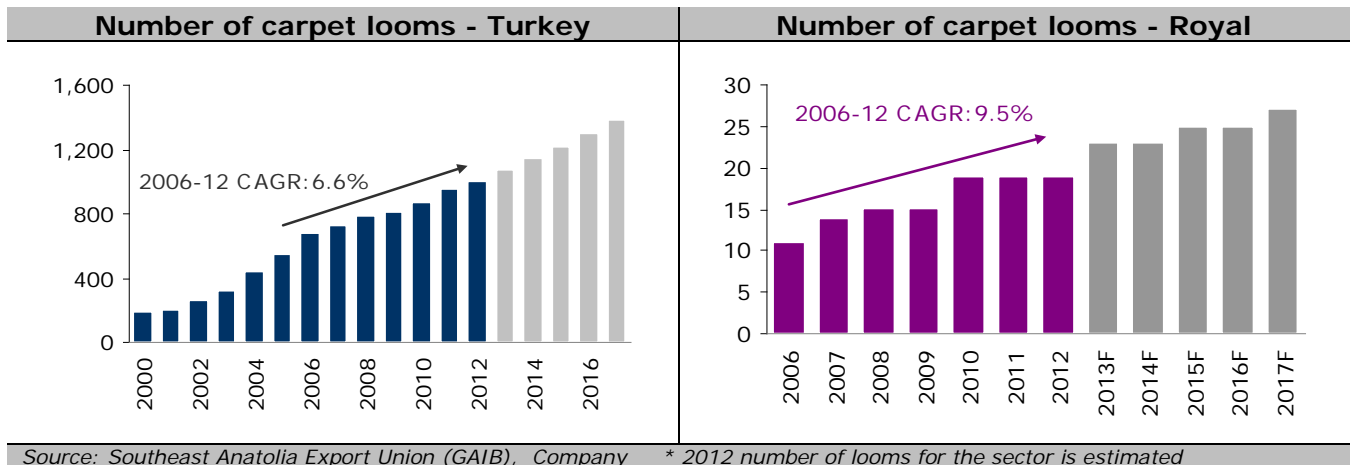
Royal Hali is involved in the production of machine-made Wilton type woven carpets and rugs (*Pls. see appendix for detailed info on carpet production and carpet types*). The company carries out its production at its plant in Gaziantep, which spans a total area of 85k m2. The company entered the business in 2005 with 11 looms and added 8 more looms to its portfolio until 2011. The company ordered 4 new looms in April 2013, of which two were delivered and installed in May. The remaining two will be in operation in June and July. Note that Royal has sufficient space at its plant to increase the number of looms to 38.

### The Sector

The total size of the Turkish machine-made carpet sector is estimated at US\$3.0bn as of 2012, of which 60% consists of exports. The sector is highly fragmented with over c.200 companies producing estimated 250mn-275mn m2 of carpets annually. We note that of the 200 producers, it is assumed that only 30-40 have both domestic and export exposure in their sales, while only around 10 (including Royal Hali) have conducted marketing activities and brand building over the past 10 years. Istanbul is estimated to make up 30-40% of total local carpet demand. The sector's production capacity is concentrated in Gaziantep, at Southeast region of Turkey.

*Total number of looms in Turkey is estimated at 1,000*

According to a research study made by GAIB (Gaziantep Export Union), the total number of looms in Turkey is estimated to have posted 6.6% CAGR in the 2006-2012 period to stand at 1,000 as of 2012. We note that in a recent research, IPSOS, a leading market research company, predicts that the sector will maintain its capacity growth pace in the next five years and that there will be over 1,350 looms in Turkey in 2017. Royal Hali plans to increase its number of looms to 27 by 2017, in other words, with 7.3% CAGR, the company would outpace the sector average in capacity growth.





*The sector's production capacity is concentrated in Gaziantep*

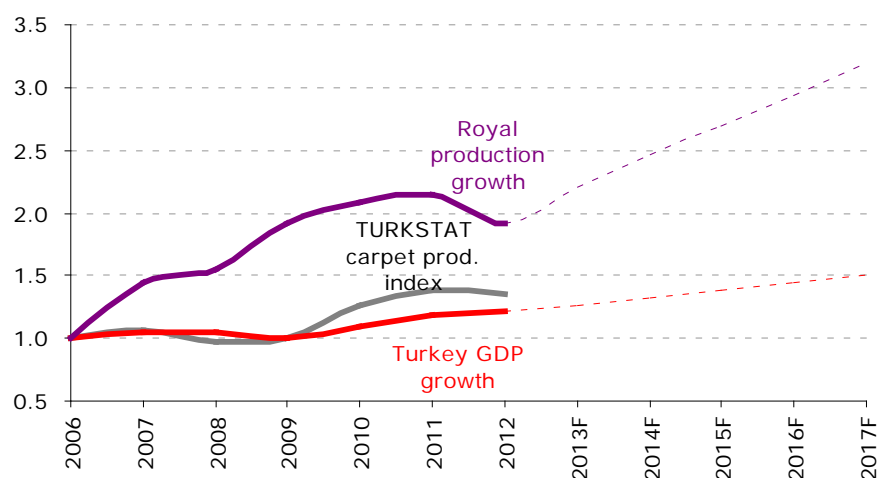
We note that 850 of a total of 1,000 looms are owned by producers in Gaziantep, an industrial province in southeast Turkey. Gaziantep's situation shows similarity with that of Georgia in the U.S. Indeed, the U.S. is the largest WtoW carpet producer in the world with a 45% share of total production, where 80% of this amount is manufactured in Dalton, Georgia. It is worth noting that the largest yarn producers in Turkey are also based in Gaziantep.

The actual production capacity of a loom depends on certain variables, such as the size of the carpet to be woven by the loom, the type of yarn used, the quality of the carpet, i.e. its density (the number of knots in a cm<sup>2</sup>), etc. Accordingly, average annual production figure can show significant deviation from one loom to the other. Based on the research by GAIB conducted through 137 producers in Turkey in 2011, the average production amount of a loom has been 269k sqm in 2007-2009, which is estimated to have remained at around the same levels in the years to follow. Royal's average production figure per loom has been roughly 110k sqm since 2007 – the discrepancy with the sector average is explained by the superior quality of Royal's carpets (higher density) and its focus on using unique designs. We expect no major change in this average production figure going forward.

*Sector's output growth outpaced the GDP growth in the past six years*

Meanwhile, the carpet and kilim production index prepared by TURKSTAT (Turkish Statistics Institute) shows that the country's total production grew with 5.2% CAGR in 2006-2012 – this compares favorably with Turkey's average GDP growth of 3.9% in the same period. Royal Hali's production, on the other hand, recorded 11.4% CAGR in 2006-12. We think that the sector is set to continue outperforming the broader economy going forward, given the positive demand drivers, particularly the expected residential growth.

**Carpet Production Index vs. GDP & Royal's production growth**



Source: TURKSTAT, Company \* all figures rebased to 1.0






### Royal Hali's brands

*Royal Hali produces and sells its carpets under three brands...*

Royal Hali produces and sells its carpets under three brands, namely Royal, Pierre Cardin and Atlas Hali. Royal brand was created from the scratch by the company. The Pierre Cardin brand rights were initially leased on 2007 and the agreement was extended for a 10 year period in 2010. The "Atlas Hali" brand was acquired at end-2010 by Royal Hali. Atlas Hali's operations are carried out under a separate company "Atlas Hali Co.", which was initially established by Naksan Holding. Royal Hali acquired the majority stake of this company as of January 2013 – Atlas Hali is now fully-consolidated under Royal Hali. The main goal of these investments was to achieve a diversified portfolio with which to target different customer segments. Additionally, the Atlas Hali brand will serve a specific purpose: Royal is using a different route-to-market, i.e. direct distribution, with Atlas, which they believe will be value-creative for the company. All three brands offer consumers a total of c.5,000 sku.

The carpet sector is subject to seasonality– 4Q is the highest season followed by 2Q, while 1Q and 3Q are considered low seasons.

Brand		Notes
Royal		Core brand, created by Royal Hali itself from scratch
Pierre Cardin		A brand name renowned globally in haute couture, fashion and home textile. Leased for 10 years until 2020. More design oriented, targets premium segment
Atlas Hali		A well known local brand acquired in 2010 and revived by Royal Hali.

Source: Company

## Competition

Royal Hali's major rivals are Merinos (owned by Erdemoglu Holding), Kasmir Hali owned by (Gulsan Holding) and Saray Hali. Foundation of Merinos and Saray Hali both date back to 1970s, while Kasmir Hali was founded in 2005. There is no other carpet producer listed in the BIST.

*There is no listed carpet producer on ISE..*

Merinos is the largest producer in Turkey, with estimated c.50 looms in production. The company produces WtoW carpets and rugs from PP and acrylic, which are produced by its yarn plant (21k tons acrylic, 26k tons PP yarn capacity/y). The company also operates a large scale furniture operation. Merinos has 5 brands sold through a network of 24 wholesalers and over 3,000 dealers.

Saray is one of the leading producers in Turkey and markets its carpets under the "Saray Hali" brand. The company utilizes a direct distribution system through its 17 regional marketing departments and over 1,000 dealers. Saray Group is also involved in several other businesses ranging from dairy farming and cattle breeding to feed production, slaughterhouse and processing facilities.

Kasmir Hali is owned by Gulsan Holding, which is the largest PP BCF yarn producer in Turkey with 90k tons/y yarn production capacity. Kasmir Hali's sales network consists of 10 regional wholesalers and over 1,100 dealers.

### Leading Carpet Producers in Turkey

Company	Date of Foundation	Place of production plant	2011 revenues (TLmn) *	Annual Prod. Capacity (theoretical, mn sqm)
Merinos	1970	Gaziantep, Rostov/Rusya	+470	15.7
Royal	2000	Gaziantep	212	12.6
Kaplan Kardesler	1984	Gaziantep	+140	15.0
Kasmir Hali	2005	Gaziantep	+130	12.0
Yasin Kaplan	1983	Gaziantep	+105	8.0
Saray Hali	1972	Kayseri	+100	7.5
Sanat Hali	1985	Gaziantep	+170	10.0
Safyun	1997	Gaziantep	+85	n.a.
Step Hali	1998	Isparta	+80	0.24
Samur	1973	Ankara	+80	18.0
Angora	2001	Gaziantep	+80	3.5

Source: IPSOS research, 2013

\*Revenues are estimated for peers.

\*\* Production capacities are estimated and point to theoretical figures assuming one type of regular carpet is produced 7/24 for the whole year.

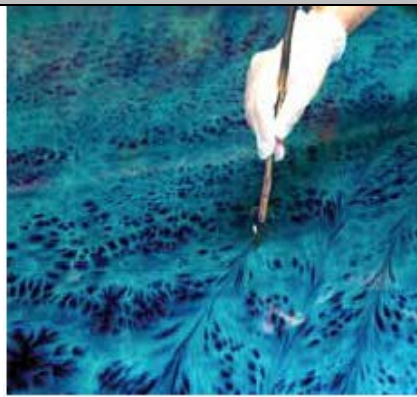
Royal Hali made a strong name in the market, particularly thanks to its innovative skills...

Despite being a relatively new player, Royal Hali's brands have earned a respected name in the market, not only thanks to high-quality production and attractive design capabilities, but also innovative skills.

- Royal Hali is the inventor of the "anti-bacterial" carpet, which offers a 3 layer protection against bacteria, fungus and mites. Other producers followed suit in launching similar features for their products, although we note that Royal owns the license for "anti-bacterial" carpets, whereby no other producer is allowed to use this feature in advertisements.
- For the first time in the world, Royal Hali launched a new product called "nano carpet" for its Atlas brand, which carry self-cleaning and dirt-repellent features. Nano carpet is produced from a chemically processed yarn which refreshes its colors when it receives direct sunlight. Moreover, the spilled liquids cannot infiltrate to the fiber and remain on the surface of the carpet, thus no stain is formed.
- Royal Hali produces unique designs through applying "Art of Ebru (paper marbling)" on carpets. Paper marbling is a method of aqueous surface design, which can produce patterns similar to smooth marble or other stone. It is one of the oldest and most prestigious Turkish arts. The patterns are the result of color floated on either plain water or a viscous solution, and then carefully transferred to an absorbent surface, primarily paper. Part of its appeal is that each print is a unique monotype. Royal Hali is the only carpet producer applying this technique to produce unique designs on carpets.

*Royal Hali is producing unique designs through applying Art of Ebru on carpets*

## Making of Ebru Hali



Source: Company

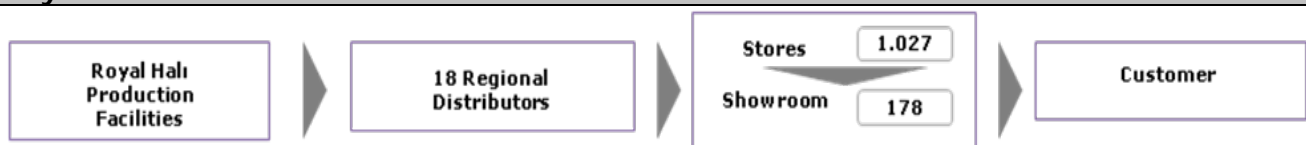
*600 sales people have registered to the intra-group website since its launch 2 months ago*

- The company launched the “Sigorthali” feature in 2011, which gives customers the opportunity to insure the carpets they purchase for a year for a very low outlay (TL5.0-10.0 per carpet) – accordingly, if a carpet becomes stained or damaged even due to improper customer use, Royal Hali promises to replace it. Since the launch, c.50% of the carpets sold by Royal was insured by the company.
- Royal is the only carpet producer to have created an iPad/iPhone application, namely “FotoDeco”, which gives users the possibility to take the photo of the room that they are planning to buy a carpet for, and insert the collections of Atlas Hali into the photo to select the most suitable carpet for that room. The company also provides virtual decoration applications for the collections of Royal and Pierre Cardin.
- Royal Hali created an intra-group website for its sales people, namely “Halicilarburada.com”. The company uses this platform to maintain closer communication with the sales force to overcome a major setback of the wholesale based distribution system, i.e. lack of direct contact with sales people. The management holds contests among sales people, provides information on the campaigns and directly communicates the incentives and bonuses it offers – the main goal being to increase the motivation and dedication of sales force. Royal said that over 600 sales people have registered to the website (since its launch in January) and they look to double this figure over the coming periods. The company manages the Sigorthali system through this website and requires its sales people to register their sales online to activate the insurance feature. In this manner, the company has the ability to trace the sales performance on a daily basis.

## The local sales of Royal-Pierre Cardin are made through wholesalers

Of Royal Hali’s carpet revenues, 80% are generated from local sales. The sale of Royal and Pierre Cardin branded carpets are carried out through the wholesaler-retailer/sales point channel. The company works with 18 regional wholesalers who maintain correspondence with a total of 1,040 sales points.

### Royal Hali – Domestic sales flow



Source: Company Store and showroom numbers are as of end-2012

The company has 769 points that sell Royal branded carpets and 493 points that sell Pierre Cardin carpets, while 222 points sell both brands. Of the total of 1,042 sales points, 191 are designed as “showrooms”, which sell only Royal or Pierre Cardin branded carpets, while the remainder are non-exclusive retailers that also sell rival brands. Royal also owns six showrooms itself, although these are dedicated to presenting carpets to retailers, rather than end-clients. Currently, the largest Royal Hali showroom has a 450sqm total area, while the smallest has a 150m2 total area. The Atlas Hali brand is absent from Royal-Pierre Cardin showrooms in order to preserve exclusivity.

### Showroom concept

The management believes that exclusive showrooms bring higher value added to the company as a greater number of products can be displayed appropriately, and the sales people dedicate efforts exclusively to the sale of Royal’s products. In this context, the company plans to increase its showroom number going forward – the initial target is at least 250 showrooms by end-2013. Needless to say, in order for a showroom concept to be successful, the manufacturer requires a product portfolio large enough to fill the shop. For that reason, only a few producers of large scale have been successful in showroom operations, while those who have tried with smaller product portfolios have failed.

*Royal targets to increase the number of showrooms from 178 in 2012 to 250 in 2013*

### Royal Hali and Pierre Cardin shops



Source: Company

The management prefers the showroom to be operated by an experienced retailer, and thus mainly seeks to transform a current sales point into a showroom rather than making a deal with a new entrepreneur from scratch. Accordingly, the key issue here is persuading shop owners from the current network to transform their shops into a showroom and drop their contracts with other carpet producers. The management uses a number of incentives for this purpose: Royal shares the initial investment cost of the showroom (which roughly amounts to TL60k (US\$40k)) and offers extra sales commissions (up to 7%-10% of the turnover) on top of the current commission



scheme. In return, Royal asks the shop owner to sign a 5 year contract with the company. Additionally, Royal determines minimum sales thresholds for its showrooms annually, and strictly demands that the shop owner deliver on targeted sales figures.

#### **Royal collects orders from regional wholesalers twice a year**

Royal management meets with regional wholesalers twice a year (usually in March and September) to discuss annual sales plans. Retailers then create “open accounts” at the company and provide collateral (generally cheques with forward paying dates) equal to the amount of the planned orders, before requesting delivery of the product to their warehouse. The finalized order plans are used as a base for the calculation of wholesalers’ sales commissions for the relevant year.

*Royal Hali’s  
wholesalers can get a  
min 12% - max 17%  
commission from the  
company annually*

#### **Pricing and sales commissions**

Royal pays 12% of revenues as the base sales commission to the regional wholesaler. This figure is increased with success fees, which are as follows:

- If the wholesaler submits its final monthly order 2 weeks before the first day of the month, it gets an extra 3% commission.
- If the wholesaler fulfills its pre-determined order for a whole quarter (i.e. draw the goods from the factory to its warehouse), it gets an extra 2% commission.

Accordingly, a wholesaler can get a min 12% - max 17% commission.

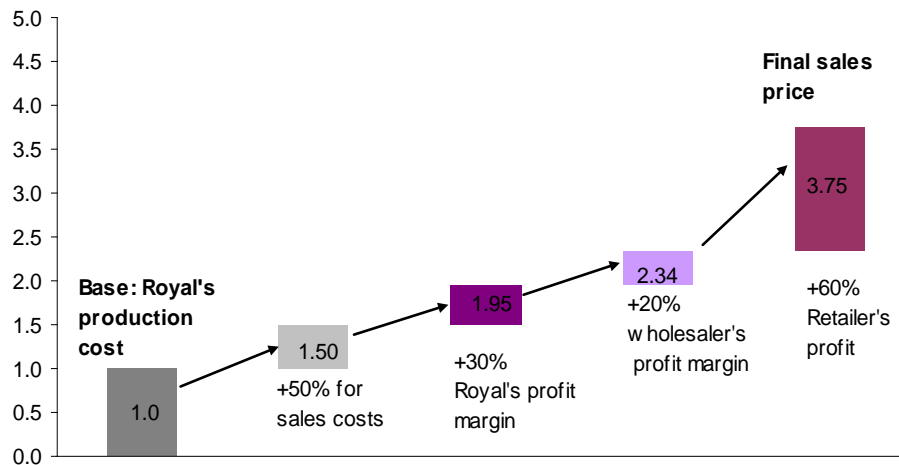
The additional incentives are as follows:

- In campaign periods, if the wholesaler exceeds the sales quota allocated to it by the management, it gets an extra 10% commission
- Royal grants extra 5-7% sales commissions to its showrooms

*The commissions are  
directly discounted from  
the invoice*

The commissions are directly discounted from the invoice made out by Royal for the wholesaler. Note that while setting its sales price, Royal applies a 50% markup on top of its production cost to cover its sales costs, followed by a 30% markup as its own profit margin. A further 20% is added on top as the wholesaler’s profit and the invoice for the goods sold is made at this level for the wholesaler, with a 17% discount from the final price to cover the maximum sales commission. The retailer then adds 60% as its own mark-up before selling it to the end-client. Thus, a carpet with a TL1.0 production cost is sold for TL3.7 in the shops.

### Bridge to end-client price of a carpet

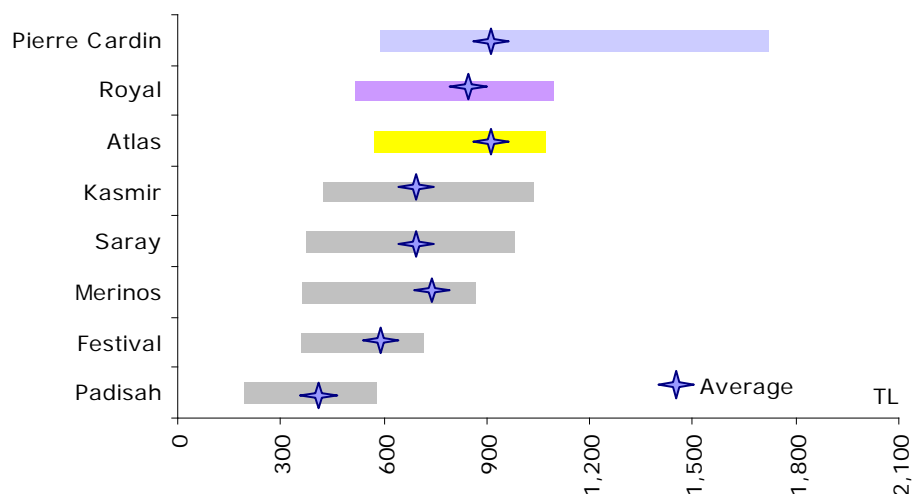


Source: Company data \* The invoice to wholesaler is made out at this stage after deducting the 12-17% sales commission

*Royal Hali prices its products with a premium over its peers on average*

Royal Hali prices its products with a premium over its peers on average. We present below an analysis, where we compared the prices of major brands in the market. The bars represent the price range of the carpets while the star represents the average price. We used the prices of 200cmx290cm (5.80sqm) and 200cmx300cm (6.0sqm) carpets that we collected from catalogues and websites of the brands. The mentioned sizes are categorically the largest among the carpets sold in the market. Royal's carpet sizes range from 80cmx150cm (1.2sqm - smallest) to 200cmx300cm (6.0sqm - largest).

### Price comparison of major carpet brands



Source: Company websites, Company price lists

\* prices of 200cmx290cm (5.80sqm) and 200cmx300cm (6.0sqm) carpets are used

\*\*Padisah is owned by Merinos, targets low income segment

*Royal Hali's exports accounted for 20% of total sales as of 2012*

### Carpet Exports

Royal Hali's exports accounted for 20% of total sales as of 2012. Of the exported products, 35% consist of PP carpets, which are sold to a number of retailers in Europe as private label products, while the remaining 65% is acrylic, which is a much higher value-added product than PP. This is in contrast to the sector average, where the majority of carpets exported are made of PP. Accordingly, Royal's average export prices are around three times higher than the sector average.

Royal exports its products to 30 countries in total to 45 wholesalers, who distribute the products to 650 sales points. The company's main export markets as of 2012 are Ukraine (17% share) and Germany (13% share) followed by followed by Turkmenistan (11%), Russia and Saudi Arabia (each with a 7% share). The company has 3 showrooms and 70 sales points in Ukraine. In Germany, Royal works with a Pierre Cardin wholesaler, who also performs sales to neighboring countries.

The company considers exports crucial to market diversification in this consumer-oriented business. Royal plans to strengthen its share in existing markets, as well as adding new ones to its portfolio. One significant potential factor on that front would be the revival of the Syrian operation. Royal had tapped the market right before the start of political troubles in the country through a local wholesaler, having generated US\$0.7mn revenues in the first year of operation alone. Obviously, sales were subsequently put on hold as political turmoil surfaced. Yet should Syria achieve political stability and Royal Hali resume its operation there, the market would probably offer even higher prospects, considering the need for residential reconstruction.

*Royal Hali is monitoring the opportunities to tap new markets abroad*

Royal is monitoring the Iranian, Tunisian, Algerian, Moroccan and Latin American markets for initiation of business. Entry barriers are high in these markets due to customs tariffs, but should these barriers be lowered, the company believes its potential to be lucrative. Note that Royal will shortly begin testing the Tunisian and Brazilian markets through local dealers.

### Atlas Hali: a new route-to-market system in the works...

Royal Hali is introducing a new sales system to the market with Atlas Hali. Accordingly, the company is not using the wholesaler based distribution system of Royal Hali, but rather a direct distribution channel to retail sales points. Atlas Hali is currently being sold at 142 sales points as of end 1Q13, and the target is to reach 350 sales points within three years.



Direct distribution has been used by a number of sector players before (but the majority uses wholesaler based distribution) and Saray Hali, one of the leading carpet manufacturers, in particular proved successful. But Atlas Hali is using a new feature here: the company is working with a single warehouse and outsourcing the logistics services to a well known logistics firm, namely “Yurtici Logistics” to secure timely delivery of orders to retailers. Saray Hali, on the other hand, uses regional warehouses.

#### Atlas Hali – Domestic sales flow



Source: Company data Store and showroom numbers are as of end-2012

#### Wholesaler based distribution vs. direct distribution

Wholesaler based distribution provides the producer with exposure to the established network of retailers, thus enabling rapid penetration, particularly for a new entrant. Additionally, producers deal solely with the wholesaler, who undertakes the entire payables risk of the retailer. On the other hand, in direct distribution the producer saves on the wholesaler commission (in Royal’s case, thus, 12-17% of revenues would be retained by the company), while direct contact with retailers enables the producer to follow sales trends and manage the sales force more effectively.

*Direct distribution method may contribute to margins...*

Royal Hali opted for the wholesaler based distribution model right at the launch of the operation, in order to ensure rapid penetration through the established sales network. Having now completed its market penetration and successfully placed its primary brands, the company is utilizing the direct distribution method with Atlas Hali. The management has asserted that they have successfully overcome the initially negative reaction of wholesalers towards them after their launch of Atlas Hali’s products, and that sentiment is now good. Indeed, should it prove successful, the company may see some positive margin contribution from Atlas Hali.

## OVERVIEW OF THE YARN SEGMENT

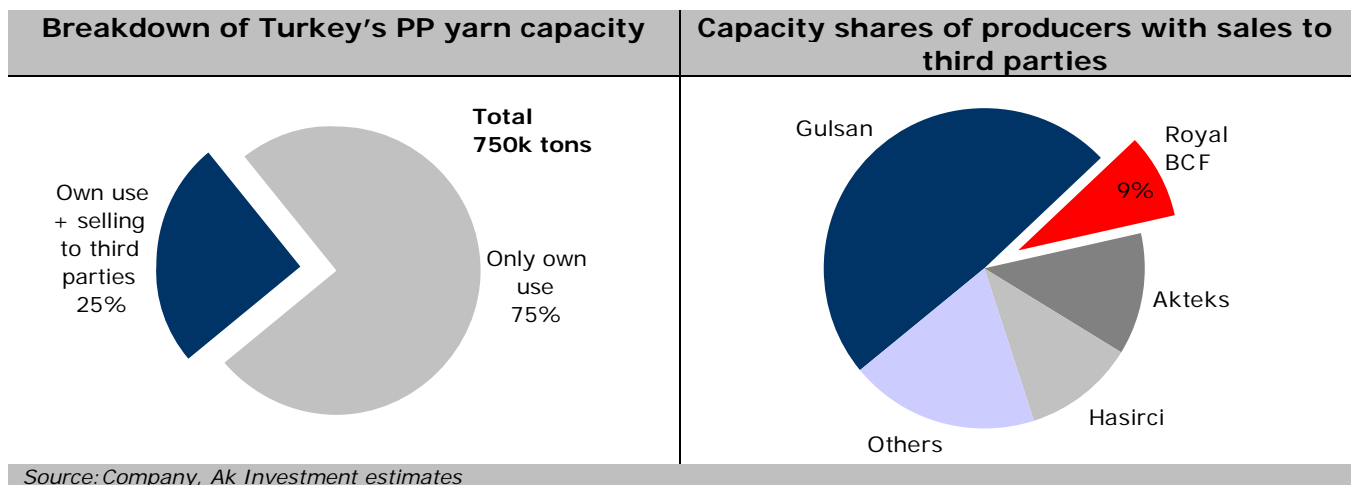
Royal is involved in the production of Polypropylene (PP) yarn. The company undertakes the production through a wholly owned company called Royal BCF (BCF stands for “Bulk Continuous Filament”), which operates a plant in Gaziantep. The plant spans a c.12k sqm area and has a c.17k tons/year PP yarn production capacity at 5 production lines. With the inclusion of a new line in May 2013, Royal BCF’s total capacity increased to 20.4k tons/year.

### The Sector

*PP yarn is mainly used as an input in carpet production*

PP yarn is mainly used as an input in carpet production, as well as in other textile products such as seating for autos, and bathroom mats, etc. The product is produced from Polypropylene, which is a petrochemical material derived from naphta.

In parallel to Turkey’s large carpet production capacity, there is a significant PP yarn production capacity in the country, which is estimated at 750k tons/y. The market is highly fragmented: while the largest producer holds 12% of the country’s total capacity (Gulsan, 90k tons/y), the top 10 producers account for just 35% of total capacity.



Meanwhile, a certain amount of the sector’s production is directly used internally by sister companies in carpet production: our research shows that of the 20 largest companies in terms of capacity, only 7 perform sales to third parties. Royal BCF almost exclusively sells its production to third parties, and ranks among the top 4 companies in this category. As asserted in our discussion of the carpet sector, Turkish demand is rather inclined towards rugs, which are mainly produced from acrylic, while demand for WtoW carpets, which are mainly produced from PP, remains low. This is quite the opposite of the demand structure in Europe and the USA, where WtoW carpets are preferred more by consumers. Accordingly, the carpet producers

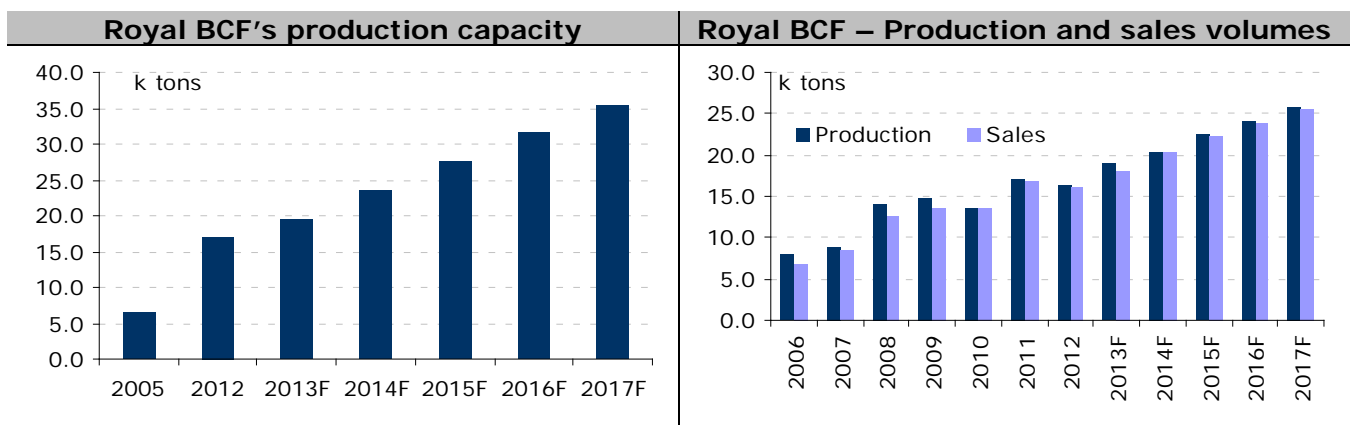
in these regions are demanding large amounts of PP yarn as a raw material. Turkish producers, with accumulated know how and technology investments over the years, high quality production at affordable prices and proximity to Europe, are among the major PP yarn suppliers to European carpet companies.

### Royal BCF

*Royal BCF started its operations in 2004 with a 6.5k tons/y capacity*

Royal BCF produces several types of PP yarn, including BCF yarn, twisted yarn, heat set yarn and frieze yarn. The company started its operations in 2004 with a 6.5k tons/y capacity, increasing this to over 20k tons/y as of 2013 after continuous investments in production machinery. It now owns 5 production lines, of which three feature mono-color and two tri-color machines. The company plans to further double its production capacity by end-2017.

Royal BCF recorded 16% CAGR in volumes in the 2006-12 period. We are modeling a 9% CAGR in volumes in 2012-2017, mainly driven by exports.



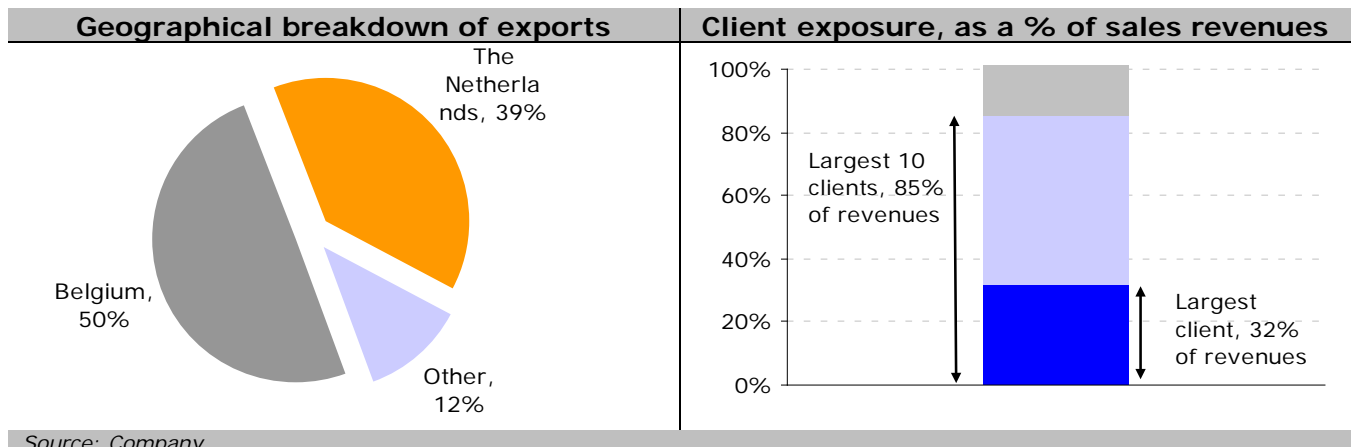
Source: Company, Ak Investment estimates

### Royal BCF is among the largest exporters

Royal BCF is the largest exporter of PP yarns in Turkey after Gulsan. The share of exports in Royal BCF's unit sales has reached 91% in 2012, following a steep uptrend from 28% in 2007. The company's primary export destinations are Belgium and the Netherlands, which account for 90% of total exports. The company is among the main suppliers of the world's leading carpet producers such as Balta (Belgium), Associated Weavers (Belgium), Condor (the Netherlands), Beaulieu (Belgium), and Betap (the Netherlands). The company recently set up a new contract with Regency, a leading producer in the UK.

BCF has a list of 50 clients, and the company performed sales to 25 of them in 2012, 20 of which are old and continuous clients. In terms of breakdown, the

top 10 clients make up c.85% of sales, with the largest client accounting for 32% of total sales.



*European carpet producers are more and more directing their purchases to third parties*

### European demand is expected to grow further going forward

European carpet producers used to meet the bulk of their yarn need from their own production facilities, but started to increasingly direct their purchases to third parties, which provide more affordable prices for high quality production. This trend further accelerated with the recent economic turmoil as carpet producers decided to shut down their yarn capacities to save on personnel costs and maintenance/investment expenses. We also note that yarn production is a continuous process, i.e. 7/24 - it is hard to persuade European workers to work long hours, which is why producers are decreasingly interested in carrying out production.

Royal BCF expects all the remaining yarn capacity in Europe (which is estimated at around 50k tons/year) to be shut down when the economic life of the production machinery expires, probably within the next 5 years, and all remaining demand to be directed to third parties. Accordingly, the company expects further growth in demand going forward.

### Potential to expand yarn portfolio with polyamide and polyester...

Alongside PP, polyester and polyamide are also heavily used as input in carpet production by European carpet producers, depending on the targeted market and usage area. Royal BCF is currently evaluating investments to add polyester and polyamide yarns to its production portfolio given the growing demand from its clients. Should this materialize, the diversified product mix, particularly through such higher value added products, might contribute to the company's figures.

### Sales process

The sales process starts with the client's visit to Royal BCF once it finishes the design phase for its new carpet collections. Clients generally come with a

specific and particular order to Royal BCF, which makes a pilot production for the company (in exchange of a fee, i.e. the pilot production is not free). Then the client takes the new yarn and produces small prototypes of the newly designed collection in its looms (50cmx50cm, for instance) and presents them to its dealers. If the dealers are satisfied with the new collection, the client returns to Royal BCF to seal a large order. Royal BCF plans its production according to these orders. Indeed, around 90-95% of Royal BCF's production queue for the upcoming four month period is generally reserved. Royal BCF management has stated that even during the global crisis, no client made any order cancellations, or failed to fulfill their reserved production quotas.

*Royal BCF's sales price is set by negotiation and generally valid for a year*

The sales price is set by negotiation and generally valid for a year. However, it is linked to PP prices, i.e. in case of a notable increase in PP prices BCF has the ability to reflect this onto its sales prices.

SUMMARY FINANCIALS		IFRS, TLmn			
Balance Sheet	2011A	2012A	2013F	2014F	
Current Assets	133	109	173	178	
<i>Cash and Cash Equivalents</i>	1	2	43	28	
<i>S/ T Trade Receivables</i>	74	59	71	84	
<i>Other Receivables</i>	20	10	12	14	
<i>Inventories</i>	32	32	36	40	
L/T Assets	142	121	137	145	
<i>Net Tangible Assets</i>	126	105	119	126	
TOTAL ASSETS	275	230	311	323	
S/T Liabilities	143	68	72	72	
<i>S/T Financial Debt</i>	60	20	20	15	
<i>Trade Payables</i>	61	29	32	36	
L/T Liabilities	25	25	26	25	
<i>L/T Financial Debt</i>	5	8	8	6	
Shareholders' Equity	107	137	214	227	
TOTAL LIABILITIES AND SH. EQUITY	275	230	311	323	
Income Statement					
Net Sales	212	222	250	284	
Cost of Goods Sold	-155	-157	-172	-196	
Gross Profit	57	65	77	88	
Operating Expenses	-26	-30	-37	-42	
EBIT	31	36	40	47	
EBITDA	40	45	51	59	
Net Fin. & Other Income (Expenses)	-28	11	-4	-3	
Profit before Tax	-5	3	47	36	
Taxes	0	-5	-4	-5	
Net Profit	2	42	32	39	
Nominal Growth (YoY)					
Net Sales	21.3%	4.9%	12.2%	13.7%	
EBIT	n.m.	16.3%	11.5%	16.1%	
EBITDA	484.3%	12.5%	12.4%	15.5%	
Net Profit	n.m.	1596.5%	-22.9%	20.2%	
Margins					
Gross Profit	26.7%	29.4%	31.0%	31.1%	
EBIT	14.6%	16.2%	16.1%	16.4%	
EBITDA	19.0%	20.4%	20.4%	20.8%	
Effective Tax Rate	5.6%	11.5%	8.8%	13.8%	
Net Profit	1.2%	18.8%	12.9%	13.7%	
Net debt/EBITDA	1.6	0.6	-0.3	-0.1	
RoE	3.0%	34.2%	18.5%	17.7%	
Liquidity					
Current Ratio	0.93	1.60	2.42	2.48	
Quick Ratio	0.71	1.14	1.92	1.92	
Source: Company, Ak Investment Estimates					

## APPENDIX I

### Global carpet sector

According to leading industry source, Freedonia, global demand for flooring and carpets is expected to increase by approximately 5% annually to 18.6 bn sqm in 2016. This will be an improvement from the 2006-2011 rate (estimated 2% CAGR), as countries rebound from the 2008 global economic crisis. Demand for carpets and rugs constitutes one-third of total flooring demand. Yet the carpet industry is a fragmented one, with the eight largest manufacturers producing an estimated 15-17% of total demand. Developed countries are understandably larger markets in flooring and carpets, given their higher income, faster residential and commercial development, and comparatively larger home sizes. However, production is rapidly shifting to lower cost countries.

*Global carpet trade can be divided into two categories: hand-made carpets and machine-made carpets*

Global carpet trade can be divided into two categories: hand-made carpets and machine-made carpets. While hand-made production was the traditional mode of carpet production for centuries, thanks to industrialization and the attendant improvement in technology, mass production by machine began to claim a larger share of the market. Today, nearly 90% of the total carpet trade, which is assumed to have topped US\$25bn in total worth, consists of machine made carpets.

Machine made carpets are either produced through “weaving” or “tufting” techniques. The latter enables faster production and is the preferred method for the production of WtoW carpets, while rugs are generally woven. In the Eastern world, there is a well-developed carpet culture as a reflection of the traditional hand-made carpet production background, whereby the carpet is treated more as a decorative object. Meanwhile in the western world, the carpet is viewed more as a flooring alternative. In that context, Eastern demand is more inclined to rugs, while in contrast Western demand tends to be for WtoW carpets.

The different perception of the Western and Eastern worlds of carpets may be clearly seen in two separate independently conducted research studies. Based on research conducted in the U.S., carpet customers put their priorities in this order: stain resistance, wear resistance, ease of cleaning, softness, color, thickness and plushness. In similar research conducted in Turkey, the consumer’s primary criteria in carpet purchases were color, followed by design/motif, quality and affordability.

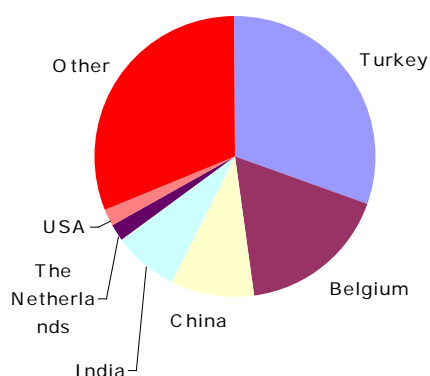
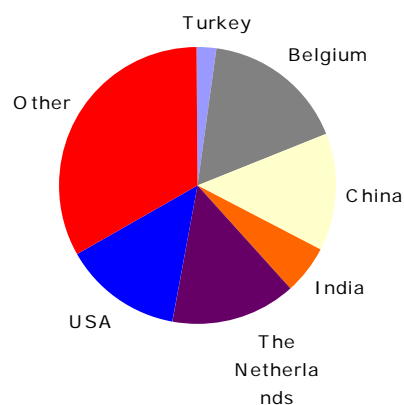
**Breakdown of International Carpet Trade**

US\$bn	2008	2009	2010	2011
<b>Machine-made carpets</b>	<b>12.3</b>	<b>10.2</b>	<b>11.9</b>	<b>12.8</b>
Woven	3.5	2.9	3.6	3.9
Tufted	6.6	5.4	5.9	6.4
Other woven	2.2	2	2.4	2.5
<b>Hand-made carpets</b>	<b>1.9</b>	<b>1.7</b>	<b>2.2</b>	<b>1.8</b>
<b>Total</b>	<b>14.2</b>	<b>11.8</b>	<b>14.1</b>	<b>14.6</b>
<b>% share</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Machine-made carpets</b>	<b>87%</b>	<b>86%</b>	<b>84%</b>	<b>88%</b>
Woven	25%	25%	26%	27%
Tufted	46%	46%	42%	44%
Other woven	15%	17%	17%	17%
<b>Hand-made carpets</b>	<b>13%</b>	<b>14%</b>	<b>16%</b>	<b>12%</b>
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: UN COMTRADE

According to UN COMTRADE statistics, global carpet exports stood at US\$14.2bn in 2008, before experiencing a 17% decline in 2009 due to global economic turmoil. Carpet exports regained lost ground in the following two years on 24% cumulative growth to US\$14.6bn as of 2011. The recovery was more pronounced in woven carpets (totaling +32% in 2010-11) compared to tufted ones (totaling +27% in 2010-11) given that economic recovery in the U.S. and Europe, as the main consumers of tufted carpets, remained slow.

According to the same research data, the largest exporters of machine made carpets are China, Belgium and Turkey. The former two mainly export tufted carpets, while Turkey, parallel to the high density of woven carpet capacity in the country, is focused on woven carpet exports, and is ranked 1<sup>st</sup> globally in that segment. Turkey exported US\$1.3bn worth of woven carpets in 2011, and increased this figure by 32% in 2012 to US\$1.7bn.

**Machine made woven carpet exporters**

**Machine made tufted carpet exporters**


Source: UN COMTRADE 2011 statistics, US\$mn



## APPENDIX II

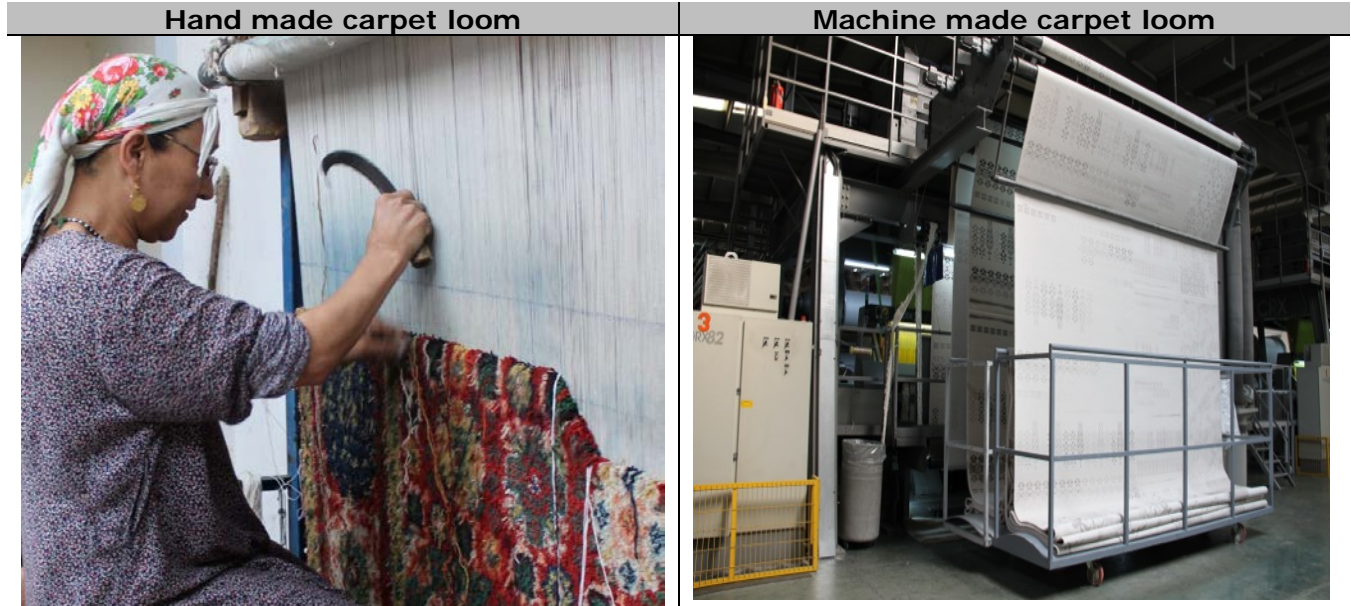
### Carpet types



In practice, virtually all carpets, irrespective of style or type, share the same basic construction: there is a pile or surface yarn, which is fixed to a backing material in some manner.

The carpet trade globally is divided into two categories: hand-made carpets and machine made ones. In former times, carpet production was made by hand, but over time, with improving technology and industrialization, production techniques became more sophisticated, whereupon machine made carpets claimed a dominant market share. Indeed today, machine made carpets have a 90% market share of the global industry, with handmade carpets on just 10%. Producing a machine-knotted rug takes approx. one hour depending on size, in stark contrast to a hand-knotted carpet, which can take months, or even years, and which is also the main reason why machine-knotted rugs are significantly cheaper. Today's machine-knotted rugs are of a high quality and much of the time it requires a trained eye to tell the difference between a hand-knotted carpet and one produced mechanically.

*Royal Hali is involved in machine carpet production.*

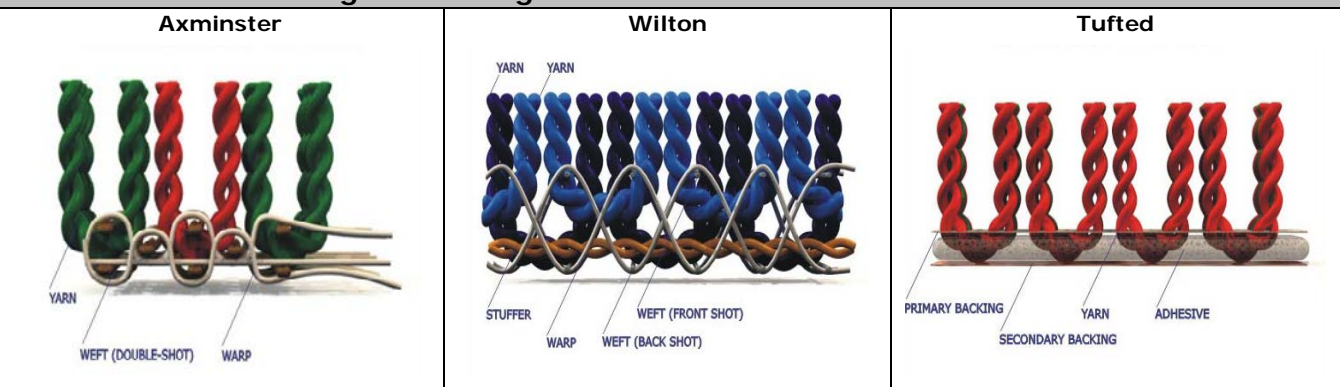


Source: Internet, Company

Machine made carpets are produced through thousands of reels of thread being fed into one giant mechanical loom, which quickly weaves the rug according to a chosen pattern. Machine made carpets are further divided into two categories according to the construction techniques, namely “woven” or “tufted”. There are two types of woven carpet - Axminster and Wilton. In

Axminster carpets, each individual yarn color that goes to make up the carpet pattern is selected by a gripper and woven with the weft. After the required yarn color has been woven into the backing, it is cut automatically to the required pile height and then reinserted when this color is next required. In Wilton carpets a continuous yarn strand is woven all the way. As a common practice, most rugs are generally woven. During production, which is carried out in fixed widths, different patterns and sizes can be produced simultaneously, which means minimal material spillage once the machine is running. There are however certain limitations, including the fact that only a certain number of colors can be used in one rug; usually between 8 and 10 colors can be combined and screened to produce a wider color spectrum. Once the rugs have been woven, the various patterns and sizes are cut apart, after which they are trimmed/edged for the best possible durability. Royal Hali uses the Wilton technique in production.

#### Illustrations – weaving and tufting



Source: Alan&Sons

Tufted carpet is made by punching the pile yarn into a pre-formed woven primary backing fabric using needles, and then applying a secondary backing fabric with latex to anchor the tufts. A secondary backing is almost always needed on tufted carpets to add dimensional stability and mechanical strength. Put simply, a Tufting machine is like a very large sewing machine. As a common practice, most wall to wall carpets are generally tufted.

Note that the method by which the carpet is made (Axminster, Wilton or tufted) is not necessarily an indication of quality. The factors that determine quality are: 1) the density of the pile (surface pile density) and 2) the fiber or blend of fibers from which it is made (pile content).

### Carpet styles

Automated looms provide various opportunities of style and texture. The most commonly used styles are level loop, multi level loop, berber, velvet, and Saxony, among others, depending on whether the yarn is looped or cut (or both used together), short or long (or used together to create a sculpture effect), densely woven or not, and tightly or loosely twisted (degree of twist). A patterned effect may be created in certain styles by using a stippled or multi-colored yarn combination.

#### Carpet Styles



1. Level loop



2. Multi-level loop



3. Berber



4. Velvet/plush



5. Saxony



6. Frieze



7. Tip sheared



8. Random sheared



9. Shag

Source: OHANA carpet and flooring website

## APPENDIX III

### Carpet Yarns

While hand-made carpets are nearly wholly made of wool, which is the highest quality yarn, machine made carpets can be made from a range of different materials and material combinations. There are rugs produced mechanically in natural materials, such as wool and cotton, although synthetic fibers and materials are also common. All materials have their own unique properties, with both advantages and disadvantages.

Wool is usually associated with sheepskin, but can also come from other animals. Once the wool has been sheared, it is spun into yarn, which is then dyed. This material is common in rugs, it has a dirt-repelling effect and the higher content of lanolin, the softer the wool and the better the luster. The wool used in machine-knotted rugs is partially reinforced with a core of synthetic fibers to improve durability, but also to ensure it doesn't split during the actual production process. Wool has excellent crush resistance, yet moderate stain-resistance. It is not actually burn resistant but it burns slowly and self-extinguishes in flames (hence it's widespread use in pubs before the smoking ban). The only downsides really are that it can be attacked by carpet moths, and can have poor sunlight fade resistance in certain pigments.

Polypropylene is a chemically produced environmentally-friendly man-made fiber. It is one of the most common thermoplastics on the market. PP is ideal for people with allergies to, for example, natural materials. The material does not shed fibers, and is easy to clean. Generally, most cold liquids will not stain a polypropylene carpet, although hot liquids present a problem.

Acrylic: Acrylic is lightweight, soft, and warm, with a wool-like feel. It is more affordable when compared to wool, and thus acrylic carpets are highly demanded by consumers. It can also be made to mimic other fibers, such as cotton, when spun on short staple equipment. Acrylic takes color well, is washable, and is generally hypoallergenic. Acrylic is resistant to moths and is very resistant to deterioration from sunlight exposure.

Polyamide, is a slightly more expensive fiber than polypropylene, and is likewise stain-resistant. For technical reasons however, it is not bleach-cleanable. Despite having better abrasion and crush resistance than polypropylene, or even wool in some cases, polyamide is a far softer fiber. When manufactured as a tufted carpet, it has a very plush velour feel and is often used in the construction of 'Saxony' or 'Velvet' style carpets. It is an extremely durable fiber, and when constructed as a low-level loop-pile carpet,

is the preferred choice for very high traffic areas in contract flooring situations. Like polypropylene, it can melt when exposed to direct heat / flame.

Viscose is a man-made fiber similar to silk and is based on natural materials such as cotton or cellulose. The material is very soft and is therefore an important element in artificial silk (rayon). Its properties mean that viscose is often used in the production of rugs to highlight details and give rugs a beautiful luster. Certain viscose rugs can sometimes shed fibers, which is due to the use of poor quality raw materials during fiber production.

Chenille is produced from different materials, e.g. cotton, rayon or acrylic, by twisting the yarn around a thicker thread. The yarn therefore becomes thick and soft, producing an exciting relief pattern thanks to the protruding yarn fibers from the twisted yarns. It is usually used in machine-knotted rugs together with viscose, which highlights the pattern.

Jute is a subtropical plant that grows in countries like India, China and Thailand. Fabric is produced from the stalks of the plant. Jute fibers are often short, which makes them difficult to spin, and thus a spinning lubricant is added. The product is relatively cheap to produce and is used in a number of machine-knotted rug warps, which creates a slightly more rigid carpet, as opposed to cotton, which makes the rug more pliable.



## APPENDIX IV

### Gaziantep

Gaziantep is the largest city of the SouthEast Region of Turkey and the 6<sup>th</sup> largest city in overall Turkey. The city has borders with Syria.

**Turkey Map - Gaziantep**



Source: Ak Investment

“Anatolian Tigers” is a term internationally used in the context of the Turkish economy to refer to and to explain the phenomenon of a number of cities in Turkey which have displayed impressive growth records since the 1980s, as well as to a defined new breed of entrepreneurs rising in prominence and who generally rose from the status of SMEs. Where particular cities are concerned, the term is most often used for the capitals or depending centers of Denizli, Gaziantep, Kayseri, Bursa, Kocaeli, and Kahramanmaras. Within Turkey, the accent is laid on cities that have received little state investments or subsidies over the years. Corum, Denizli, Gaziantep and Kahramanmaras, in particular, are cited among the cities who "made it themselves". In time order, while Denizli in Turkey's Aegean Region was the early hour precursor for rapid growth in an Anatolian Tiger pattern, Gaziantep, Malatya, Konya and Kayseri are the most recently cited prominent Tigers on the basis of the number of companies they have among Turkey's biggest 500.

Aside from their production units, the definition generally excludes companies who have their headquarters in the largest cities of Turkey; namely Istanbul, Ankara, Izmir, Bursa and Adana, as well as companies constituted with public capital.

A side note for Gaziantep is that; Van De Wiele (Belgium) is the largest producer of carpet looms globally. Apart from the company itself, the only company that produces parts for Van De Wiele looms is in Gaziantep, Turkey.

**Gaziantep Overview**

Population (mn)	1.75
% of Turkey	2.3%
Urban population ratio	89%
Number of exporting firms	1,142
Number of export destinations	172
Share in Turkey's total exports	3.70%

**Gaziantep's share in Turkey's production (product based)**

Machine Carpets	80%
Pistachio processing and production	75%
Plastic bags and sacks	60%
Acrylic-Synthetic-Polyester-PP Yarns	60%
Non-woven fabrics	59%
Macaroni	40%
Wafers-Confectionary-Chocolate	30%
Red pepper flakes	27%
Baby diapers	10%

**Gaziantep's Place Among Top 10 Exporting Provinces (US\$bn)**

Istanbul	59
Kocaeli	12.6
Bursa	12.5
Izmir	8.1
Ankara	5.9
Gaziantep	4.9
Manisa	4.3
Denizli	2.8
Hatay	2.14
Sakarya	2.1

*Source: Gaziantep Chamber of Commerce*



APPENDIX V

Samples from Royal Hali's collections

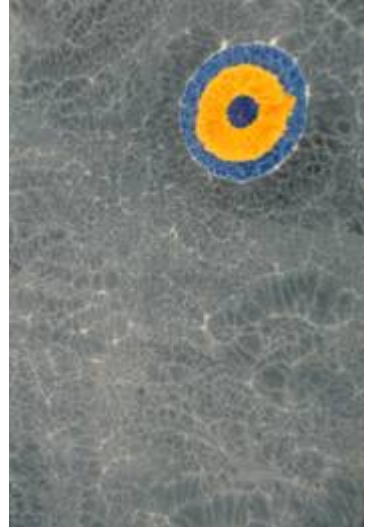
**Samples**



**Samples**



**Ebru (Paper Marbling) Collection**



Source: Company



## APPENDIX VI

### Photos from Royal's Facilities





## APPENDIX VII

### Glossary

**Acrylic** - inexpensive synthetic fiber, inferior to nylon and olefin

**Antimicrobial** - chemically treated to reduce growth of bacteria and fungi

**Antistatic** - dissipating electrostatic charge below the level of human sensitivity

**Axminster** - machine-made rug or carpet with individually inserted pile tufts; this allows complex color patterns and designs, including Oriental

**Backing** - fabric or yarns serving as a foundation for the face fiber

**Berber** - naturally (undyed) looking rug or carpet; originally made by North African Berber tribes from undyed wool

**Braided** - usually circular/oval rugs made of braided yarns

**Broadloom** - carpet wider than 6 feet

**Chenille** - luxurious pile fabric

**Cotton** - soft natural plant fiber, inferior to wool and sisal or hemp

**Density** - individual fiber count per unit of rug/carpet area indicator; obtained from the pile yarn weight, or "face weight" (in ounces per sq. yard) divided by pile height (in inches)

**Dyeing** - adding colors to rug/carpet fiber, yarn or fabric; face fiber dyeing can be done before yarn is spun (solution or stock dyeing), after it (skein, package or space dyeing) and after the rug/carpet is put together (piece and continuous dyeing, printing)

**Fading** - loss of color due to the effects of light, gases (ozone, nitric oxide, hydrogen sulfide) or chemicals (cleaners, bleach, chlorine)

**Frieze** - carpet with very tightly twisted pile, giving to it a nubby/curled appearance

**Jute** - natural fiber often used for rug/carpet backing material

**Knot count** - number of knots per square meter

**Knotted** - usually a high-quality handmade woven rug made by tying each individual yarn tuft to the warp strand

**Nylon** - strong, resilient synthetic fiber

**Polypropylene** - strong synthetic fiber with very good chemical properties and low resilience



**Pile** - top surface of a carpet or rug

**Plush** - cut pile with yarn ends blending together

**Polyester** - synthetic fiber similar to olefin

**Resilience** - the ability of the face fiber to regain the original thickness after being subjected to compression force

**Runner** - long narrow rug up to 3 feet wide

**Saxony** - cut pile rug/carpet with heat set pile yarn, forming vertical tufts with well defined tuft tip

**Sculptured** - with a pattern created by uneven pile height

**Shag** - long pile rugs with loose end pile tufts

**Soil resistant** - chemically treated to minimize soiling of the face fiber

**Stain resistant** - fiber (usually nylon for residential purposes) chemically treated to minimize adhering of food colors

**Static** - build up of electrostatic charge in a rug/carpet exposed to traffic

**Tufted** - made on machine with needles inserting pile yarn into a backing; most economical serial rug/carpet production method

**Velvet carpet** - woven on velvet loom, typically in solid colors

**Warp** - length-wise running yarn in woven rug/carpets, interlacing with weft yarns

**Wool** - strong natural fiber of animal origin; the oldest, most luxurious after silk rug face fiber material

**Weft** - width-wise running yarn in woven rug/carpets, interlacing with warp yarns

**Wilton** - produced on a Wilton loom, with limited color palette, but often with intricately textured or sculptured pile; complex color patterns are possible in Wilton cross-weave

**Woven** - rug or carpet created by interlacing wefts and warps into a unified backing/pile structure

**Yarn** - strand of fibers used for rug/carpet production

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