CFA Institute

CFA Institute Research Challenge

hosted by
CFA Association Russia

Team Q

This report is published for educational purposes only by students competing in The CFA Institute Research Challenge.

Retail Industry, Consumer Staples Sector
Moscow Exchange, London Stock Exchange

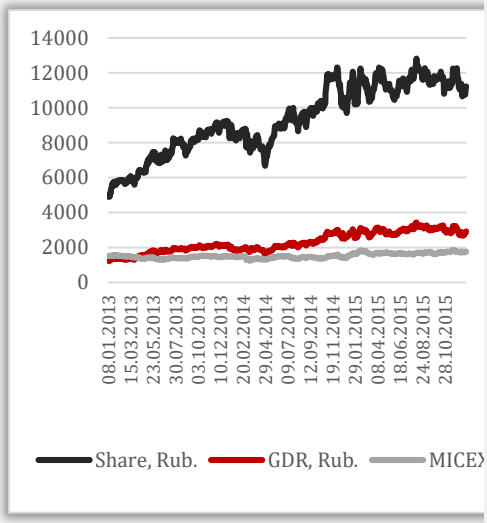
PJSC Magnit

Date: Jan, 20th 2016
Ticker: MGNT:RM (Bloomberg)

Current Share Price: RUR10,350
Current GDR Price: RUR2,449

Recommendation: HOLD
Target Share Price: RUR11,712
Target GDR Price: RUR2,342

Share Price Movement



Highlights

We have conducted the analytic report on PJSC Magnit with a HOLD recommendation based on the target price equal RUR11,713 which is upside by 13.2% to the market Magnit share price which was RUR10,350 on the 20th of January 2016. Also we have obtained the GDR price equal RUR 2,342 which is downside by 4.4% to the market GDR price on the 20th of January 2016 which was 2449 RUR. Our recommendations are supported by the factors specified below:

Valuation:

Magnit share has an intrinsic value of RUR 11,713 offering an 13,2% upside to the market share price on the 20th of January 2016. Magnit GDR estimated value equals RUR 2,342, which is downside to the market GDR price at the date specified before. Estimated values and recommendations were obtained by DCF Methodology and confirmed by Relative Multiples Valuation.

Growth drivers:

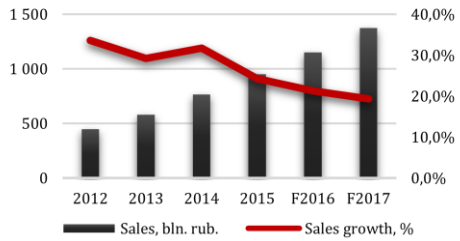
Magnit is a constantly developing retail company applying innovative techniques to their business models making the possible the company growth despite negative economic environment. Among the main growth drivers are competent management board, high levels of upstream integration, innovative logistic systems, strong financial performance and high level of solvency. Also, according to the Gfk study on 2014 key retail indicators, the value of 2014 selling space per capita in Russia is equal to 0.69, which is considered to be one of the smallest values among European countries, so Russian food retail industry has a high growth potential.

Main risks:

Retail industry is low-concentrated and highly competitive and Magnit has the lowest average check among its peers meaning that most of the audience are from low-income population very sensitive to price changes. Generally, consumers in retail industry can easily switch to another supplier, which makes the fight for the market share among companies even tougher. This is the concern for Magnit as well as for any company of the industry. Additionally we should remember about an economic situation in Russia, which also raises risks for Magnit because, according to forecasts, real wage in Russia in 2016 will fall by 0.2% and the estimated increase in retail industry turnover in 2016 will be only around 0.4%.

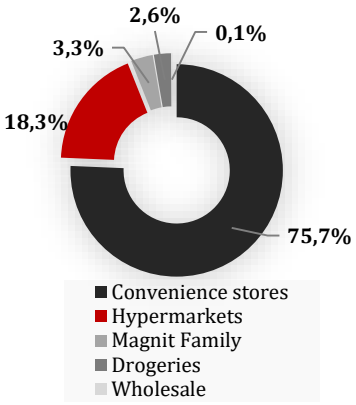
Considering everything, Magnit has stable and innovative business structure allowing it to show a steady growth through recent years despite economic fluctuations if Russia. However, tough competition in a retail industry, powered by current economic stagnation will act as constraining factors for Magnit future growth. However, Magnit regularly pays dividends and respect all the rights of shareholders, which make its shares look favorably to hold by investors who wants to save their money, confirming our HOLD recommendation.

Figure 1: Sales Dynamics



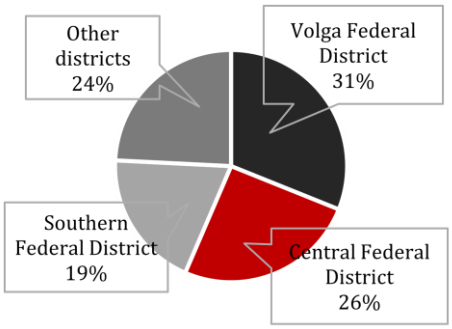
Source: Company Data, Team Estimates

Figure 2: Sales by Store Formats, 2014



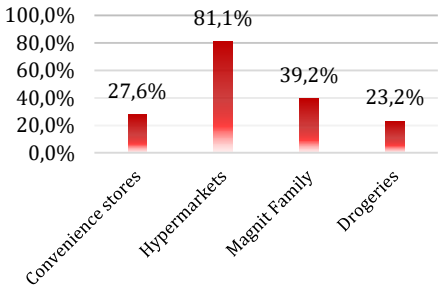
Source: Company Data

Figure 3: Number of Stores by Districts, 2014



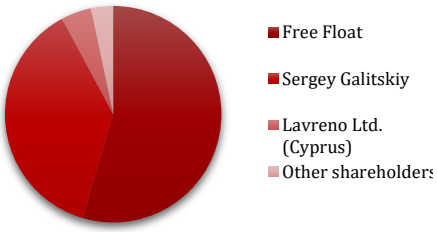
Source: Company Data

Figure 4: Share of Owned Stores by Store Formats, 2014



Source: Company Data

Figure 5: Shareholder Structure, 2014



Source: Company Data

Business Description

Magnit (MGNT) is a top-level food retailer in Russia. It was founded in 1994 and is currently headquartered in Krasnodar Krai (Russian Federation). Magnit operated as a private Company for 12 years until its IPO in 2006 in Moscow Interbank Currency Exchange and Russian Trading System and then its SPO in 2008 in London Stock Exchange.

Its stores are positioned in four formats: convenience store, hypermarket, Magnit Family store and cosmetics store (drogerie). In December 2015, the most part of Magnit`s total revenue was derived from the sales of convenience stores – 70.55% (RUR71,908.81 mln), then a significant part was from hypermarkets – 18.16% (RUR18,505.93 mln). Nearly equal parts of the Company`s revenue are derived from Drogeries with the result of 5.56% (RUR5,663.87 mln) and from Magnit Family – 5.73% (RUR5,844.09 mln). The sales by formats are presented in the Figure 2.

Today Company`s stores include over 9,700 stores, which are located on about 3.9 mln square feet of selling space in 2,108 regions of Russian Federation. In 2014 the most of Magnit`s total stores were located in the Volga Federal District (31.1% of stores) and in the Central Federal District (25.4%), least number of stores was located in the North-Caucasian Federal District (4.1%) and in the Siberian Federal District (2.6%).

The last revenue of Magnit in 2015 was more than RUR760 billion that provided EBITDA of 11.25% (Figure 1). The high results help the Company to be a leader in terms of revenue among main retailers in Russian Federation. Also in 2015 the Company was hiring about 260k workers. Market capitalization of the Company is USD21 billion and market share is 6.9%. Magnit has a high level of creditworthiness, what confirms the foreign currency credit rating BB+[1]. It is the highest possible credit rating in Russian Federation.

Company strategies

The Company's strategic direction focuses on five points, which can be divided between main development strategies:

- **Growth:** further organic store growth in existing markets and development of multi-format business model on the new geographic territories, that includes the opening of minimum 500 convenience stores and 250 drogeries in regions with population more than 5,000 people and the opening of 50 hypermarkets in regions with population more than 50,000 people.
- **Value:** development of multi-format business model to meet the demands of people with different incomes, thus stick to the policy of «value for money» (price-quality critirion) – low prices, high quality and varied assortment.
- **Efficiency:** in order to effectively centralized and vertically integrated inventory management and traffic continue to invest in the IT-system and improve the logistic processes. With a view to effective cost management continue to develop its own import that included an increase of the share of direct deliveries of fresh fruits and vegetables.

Shareholder structure

Magnit is owned by two major shareholder, the public and other shareholders. As of June 2015, Sergey Galitskiy owns 36.5% of the common shares. The Lavreno Ltd. (Cyprus) owns 4.5% of the outstanding shares. The public owns the remaining 55.8%, and 3.2% are owned by other shareholders.

Business model

Business model of Public Joint Stock Company Magnit is vertical integration. The model includes business retail, business logistics, business transport, business production and business import. All five points are linked by one centralized management system. Vertical integration model provides movement of goods turnover from producer to consumer. Low level of outsourcing is an opportunity for Company to control risks. The international direct import provides 10%[2] of total revenue. The Company has 585 self-production positions, what provides 11% of total revenue[3]. The development of business logistics means the development of density of stores and distribution centers, where orders are collected on individual stores and consumer goods are shipped and stored. It makes possible to save margin on transport and logistics. The development of business transport involves the increase of Company`s own trucks. It allows the Company to control the delivery time and availability of products on store shelves (service level). The centralization ratio of convinced stores is 90% about the results of 3Q 2015, the future targets has close value and equal to 92%. 10% is accounted for the outsourcing, when the future target is 8%. The centralization ratio of hypermarkets is 72% about the results of 3Q 2015, when the future targets has close value and equal to 80%. 28% is accounted for the outsourcing, when the future target is 20%. Magnit continues to innovate at all stages of delivery that allows the Company to be a leader in efficiency and profitability.

Corporate management

Management of Magnit consists of industry professionals that have years of experience and have been in the Company for a long time. The management team is led by Sergey Galitskiy – CEO, Chairman of the Management Board and the founder of Magnit. Mr. Galitskiy, graduated in finance, has expanded a small Krasnodar retail chain into Russia's largest retail network, uniting thousands of stores across the country. Along with Mr. Galitskiy there are professionals that have been with Magnit since 2000s. Many of them have built their career inside the Company. The members of the Board of Directors have retail or financial experience. Together they create a team that keeps Company with stable growth rates even during current crisis in the country, as well as it was in 2009, when economy experienced a downturn. The management made Magnit the most competitive retailer in the Russian market in just 15 years, continuing the expansion of the Company across the country and maintaining the industry-highest profitability rates.

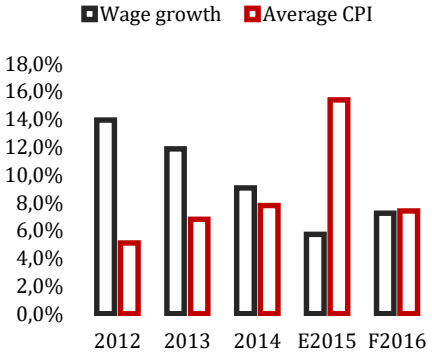
[1] S&P at 13.04.2015
[2] As for 31.12.2014
[3] As for 30.09.2015

Table 1: ISS Corporate Governance Quickscore

Criteria	Risk
Board Structure	Low
Shareholder Rights	Very low
Compensation	Low
Audit & Risk Oversight	Very high
Magnit rating	**Very low**

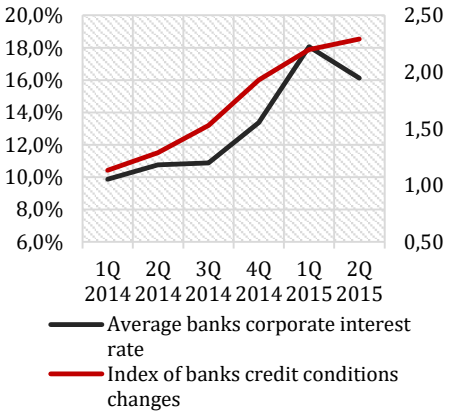
Source: ISS

Figure 6: Wage Growth and CPI



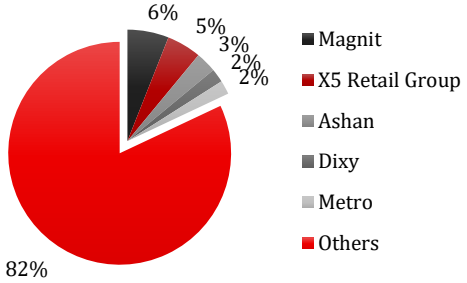
Source: MED

Figure 7: Credit Conditions



Source: CBR

Figure 8: Top-5 Food Retail Industry Players



Source: INFOline, 2014

Corporate Governance

Magnit has low corporate governance risks with high quality of important corporate information disclosure and transparency. Company has a clear strategy and vision of future positions backed by strong current performance results achieved under a thorough control of Company's management team. Magnit has been consistently performing at above average levels of retail industry in Russia also showing strong results during 2008-2009 financial crisis. Despite of some little drawbacks in the supreme bodies of Magnit management, namely a low degree of the board of directors' independence and a lack of legal committees, the board of directors itself and the management board are well organized and manage the Company in accordance with its corporate strategy. The rights of shareholders are fully respected. Magnit has a transparent dividend policy, disclosing it in its legal documents. It constantly pays dividends since 2008, and the dividend growth rate is positive through time. Finally, Magnit has a high hostile takeover defense, achieved by its capital structure with a high 54% free-float and 37.5% stake controlled by the CEO Sergey Galitskiy. Magnit has a high Corporate Governance score according to the ISS (Institutional Shareholder Services) Quickscore rating. More detailed analysis is presented in Appendix L.

Industry Overview and Competitive Positioning

Industry demand

The major factor influencing food retail industry demand is a real wage growth. According to our estimates, increase of real wage by 1% leads to increase of food retail industry real revenue growth by 0.61% on average (Appendix F).

Further real wage decrease, but not so significant as in 2015

According to the Ministry of Economic Development (MED), real wage decrease by 8.1% is expected in 2015. One of the reasons is inflation rise (2014 average CPI – 7.8%, E2015 – 15.4%, MED) due to ruble devaluation and food products embargo. Another reason is decline in real GDP by 3.9% (MED), which leads to wage growth deceleration (2014 wage growth – 9.1%, E2015 – 5.7%, MED).

2016 is expected to better than 2015, but not so well as it should be for effective retail industry development. According to MED, real wage is projected to decrease by 0.2%. The probable reasons are decline in inflation (F2016 average CPI – 7.4%, MED) caused with contractionary monetary policy (the key interest rate increase) of the Central Bank of Russia (CBR) and real GDP growth rise to 0.7%.

Industry Supply

The major factor influencing food retail industry supply is credit conditions. According to our estimates, increase of the average CBR key interest rate by 1% leads to decrease of food retail industry real revenue growth by 0.13% on average (Appendix F).

Decline in interest rates, but not to the pre-recession levels

In the autumn of 2014 the CBR increased the key interest rate by 9% (from 8% to 17%) for inflation deceleration (since 2013 the CBR has intended inflation targeting policy). The rise in the key interest rate led to banks interests rates increase (August of 2014 average banks interest rate – 10.6%, January of 2015 – 19.9%, CBR).

As inflation started to decrease in April of 2015, the CBR lowered the key interest rate. At the end of 2015 the key interest rate was equal 11%. According to Bloomberg consensus-projections, the key interest rate is expected to decrease to 9.5%, which is not lower than the pre-recession level.

Banks tighten requirements to borrowers

Banks started to tighten requirements to borrowers in 2H 2014 because of rise in non-performing loans (what led to problems with capital adequacy). According to the CBR, the index of changes in banks credit conditions related to borrowers requirements started to significantly grow in 2H 2014 (Figure 7). The growth decelerated in 2015. However, due to challenging macroeconomic conditions banks are not expected to weaken requirements to borrowers in 2016.

Food retail industry

Russian food retail industry is considered to be fragmented. The top-10 players (Magnit, X5 Retail Group, Aushan, Dixy, etc.) account for less than 25% of the market.

According to AC Nielsen Report 2014, the share of modern trade formats is equal 64% in 2014, and it has grown by 29% since 2008.

Food retail industry real revenue is expected to decline by 8.5% (MED) in 2015 due to purchasing power decrease and credit conditions worsening. In 2016 0.4% real growth (MED) is projected.

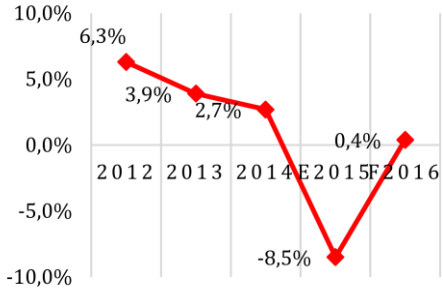
Industry regulation

The food retail industry in Russia is regulated with the Trade Law. According to the law, a retailer cannot open new stores in a district, region or city, if his revenue exceeds 25% of total retail revenue in a district, region or city. The purpose of the provision is to regulate industry competition. Other provisions of the law limit the discount, which a supplier can make for a retailer, to 10% and the credit period for retailers to 10 days (for products whose sell-by date is less than 10 days) and to 30 days (with sell-by date 10 – 30 days). The purposes of the provisions are to regulate power of retailers over suppliers.

High growth potential of Russian food retail industry

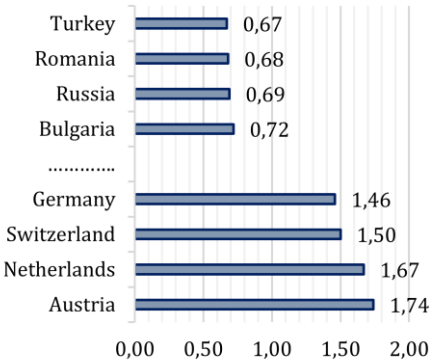
Russian food retail industry has a high potential for growth. According to the Gfk study on 2014 key retail indicators, the value of 2014 selling space per capita in Russia is equal to 0.69, which is considered to be one of the smallest values among European countries (the average value among European countries is

Figure 9: Food Retail Industry Real Revenue Growth



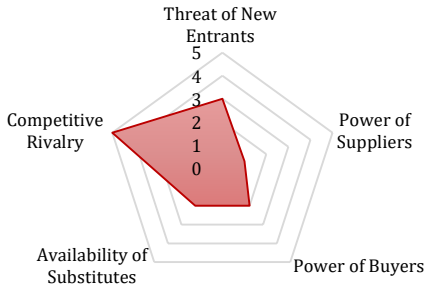
Source: MED

Figure 10: European Countries Sales Area per Capita



Source: Gfk study on key retail indicators, 2014

Figure 11: Porter's Five Forces Analysis



Source: Team estimates

equal to 1.12, median value – 1.08, minimum value – 0.67, maximum value – 1.74).

We tested the hypothesis that retail industries in countries with smaller values of selling space per capita grow faster than the ones with higher values (Appendix G). According to the results, the hypothesis is correct. Subsequently, Russian food retail industry has a high growth potential.

Competitive Positioning

Currently, the retail sector of FMCG is characterized by relatively high level of development through active expanding, and the largest market share occupied by retail chains. Despite high competiveness, Magnit hold firm positions in the retail industry. It has the highest market share in terms of revenue that equals 6.9% (Table2). Magnit is a leader among peers in Net Debt / EBITDA ratio, selling space and EBITDA margin. Furthermore, in comparison with the whole Russian market the retailer reached the best credit rating of BB+[4].

Retail market is very attractive because it has a lot of potential (Figure 10,11). The sector is characterized by low buyers and suppliers power, weak substitution availability as online-service, but with moderate threat of new entrants. However, within the current economic conditions, market entry for new players is difficult because of poor credit conditions and declining population purchasing power (Appendix M). During the previous financial year, not only interest rates on loans have increased, but also the requirements imposed by banks for borrowers have become tougher.

Magnit quite successfully runs the strategy focusing on small localities with population accounted for 50'000, where its peers had not been before. This fact serves fast expanding and, consequently, revenue growth. Among the competitors, Magnit has the highest level of solvency, and is one of the few who do not have foreign currency debt. In other words, Magnit has more opportunities for further expansion of that of its peers.

Besides the Company advantages, Magnit has a serious drawback. The Company has the lowest average check among peers, which indicates that his audience is low-income. This consumers segment is less payable and very price sensitive. The company has to carefully monitor its pricing policy to avoid losing a large consumers share.

Retail industry also has a serious shortcoming associated with government regulation. Annually, legislation that controls trading activities is updated with amendments and new regulatory acts. This is due to the fact that large cash flow is carried out in the trade, as well as that retail sector is closely tied with the population. Nearest innovations can concern relationships with suppliers and direct imports.

Thus, in conditions of aggressive fight for market share and constant state control the competitive advantage will be determined by Magnit's ability to instantaneously respond to external change.

Investment Summary

We have used the Discounted Cash Flow method in order to determine the target price of Magnit share and Magnit GDR. We have obtained the share target price equals RUR11,712 which is upside by 13.2% to the market Magnit share price which was RUR10,350 on the 20th of January 2016. Also we have obtained the GDR price equal RUR 2,342 which is downside by 4.4% to the market GDR price on the 20th of January 2016 which was RUR2,449. According to DCF valuation, we issue HOLD recommendation. Relative Multiples valuation methodology supports our results: the estimated share price is RUR10,281 (downside by 0.7%) while the estimated GDR price is RUR2,056 (downside by 16%). Our valuation is supported by numerous merits specified below, but a number of concerns should be taken into account as they are listed below too.

Merits

High level of upstream integration

Magnit has the high level of upstream integration, which allows excluding some risks connected with supply and distribution. Magnit imports some products directly from foreign suppliers without attracting any intermediates, which help the Company to reduce costs and increase the reliability of deliveries time and volume. Additionally direct import gives a wider variety to choose the supplier of imported goods. Magnit has its own greenhouse production located in Krasnodar Krai and its total square is 83 hectares.

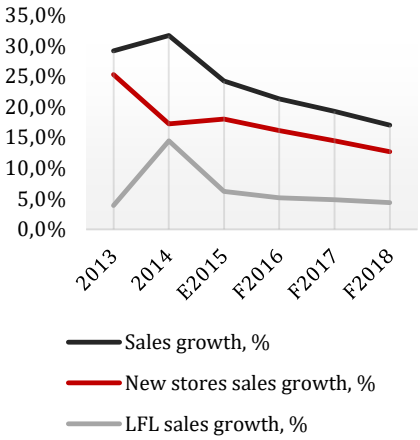
Table 2. Key Competitors

Company	Credit Rating	Net Debt / EBITDA 1H 2015	Revenue 1H 2015, B RUB	Revenue Growth 1H 2015	Selling Space 1H 2015	Centralization 1H 2015	Direct Import 1H 2015	Private Label 1H 2015	EBITDA Margin 1H 2015	Market share 2014
Magnit	BB+[5]	0,9	454,9	30,0%	3928	90%[8]; 73%[9]	10%	11,0%	10,7%	6,9%
X5 Retail Group	BB-[5]; B-[6]; Ba3[7]	2,4	380,7	27,3%	2844	78%[11]	-	-	7,2%	5,9%
Okey	B+[6]	3,0	75,9	3,6%	568	-	-	-	6,2%	1,4%
Dixy	-	2,1	131,6	23,1%	840	90%	12%	16,3%	5,2%	2,1%
Lenta	BB-[5]; Ba3[7]	2,4	114,9	33,8%	751	42,9%	4,2%[10]	12,7%	7,8%	1,8%

Source: Companies' reports, S&P, Moody's, Fitch

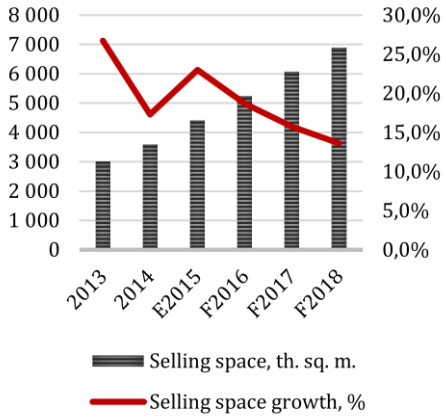
[4]The Company is rated BB+ in both S&P and Rusbonds
[5] S&P
[6] Fitch
[7]Moody's
[8]Home stores
[9]Hypermarkets
[10]Not share of revenue
[11]2014

Figure 12: Sales Dynamics



Source: Company data, Team estimates

Figure 13: Sales Area Dynamics



Source: Company data, Team estimates

Table3: Multiples valuation

Multiple	Median	Share	GDR
P / E, LTM	11,67	17,69	20,93
P / E, E2015	21,91	15,36	18,17
P / E, F2016	13,76	10,77	12,74
EV / EBITDA, LTM	7,47	9,73	11,51
EV / EBITDA, E2015	7,69	8,26	9,78
EV / EBITDA, F2016	6,60	6,25	7,40

Source: Bloomberg, Team estimates

Additionally Magnit has its own production facilities for sugar, cereal, rice, frozen fish and many other products. Own production helps to reduce supply risks and according to Magnit CEO Sergei Galitskiy Magnit will create 40 more own production facilities in the future 10 years. Magnit also has own distributive centers which decreases deliveries delay risks and delivery costs. The last but not the least is the fact that Magnit has its private label. All the items mentioned above are constantly developing by Magnit management and help to keep leadership positions among retail industry peers.

High level of solvency

Magnit has a high level of creditworthiness. Firstly, Company has the highest possible credit rating in Russian Federation, which is equal BB+, according to the S&P rating agency estimations. Secondly, Magnit has low debt load with the lowest Net Debt/EBITDA ration among industry peers, which is 0,9x. Additionally Magnit has no foreign currency debts decreasing foreign exchange risks. Finally, Magnit has high interest coverage ratio and high level of liquidity. All specified above decreases to the minimum levels the probability of Company default and its cost of debt.

Developed and innovative logistics system

Own distributive centers and developed logistic system lead Magnit to the 23th place in the Forbes Top-100 World's Most Innovative Companies in 2015. It should be noted that it is the only Russian company in this rating with the "innovation premium" of 57.9% (the leader of the rating "Tesla Motors" has 84.2% premium).

Concerns

Tough competition level in the retail market

The retail sector of FMCG in Russia is characterized by relatively high level of development through active expanding and the largest market share occupied by retail chains. Thus retail industry is low-concentrated and highly competitive. Despite this, Magnit holds leading positions in the industry with its market share in terms of revenue of 6.9%. However, Company has the lowest average check among its industry peers indicating that most of its consumers are from low-income population. This consumers segment is less payable and price sensitive, thus it will raise the risk of losing consumers if some changes in Magnit pricing policy occur. Generally, consumers in retail industry can easily switch to another supplier, which makes the fight for the market share among companies even tougher. This is the concern for Magnit as well as for any company of the industry.

Economic risks

Macroeconomic conditions in Russia became very tough at the end of 2014, because of sanctions imposed against Russia by the number of western countries. High interest rates make debt financing more costly for companies, high inflation rates decrease real incomes of Russian population decreasing the demand for retail companies' production. 57% of buyers intent to cut their spending including expenditures on convenience goods according to RBC surveys. Taking into account the fact that Magnit focuses on price sensitive consumers, the Company may undergo a revenue decrease in the nearest future.

However, during 2015 Russian companies adopted to new economic conditions but still some problems continue to put pressure on Russian business. According to forecasts of the Ministry of Economic Development and Trade, the decrease in GDP in 2016 will be 0.7%. Real income of population in Russia will fall by 4% and unemployment rate will rise to 6.3%. Overall, retail turnover with fall by 2.5%. Thus, economic conditions will not be so easy for retail companies and Magnit will have to find the path through future economic difficulties.

Legislation regulation risks

In the early 2015 Russian bureaucrats proposed an amendment to the act «About trade» that implies a decrease in the maximum permitted size of retro-bonus from 10% to 3% of supply amount, and the prohibition of any additional payments to retail chains by suppliers. In spite of the Ministry of Industry and Trade's negative opinion regarding this novelty, in May 2015 a bill was passed in the first reading. Surprisingly, for the second reading the Ministry has offered to totally prevent payments of any possible compensation, including retro-bonuses. The second reading postponed from month to month. Moreover, The Ministry of Economic Development and Trade warns that this will lead to a redistribution of the financial burden from suppliers to consumers and, consequently, higher prices. In the case of the entry into legal force of the amendments, margins of large retailers, including Magnit, will be reduced significantly.

Valuation

We have considered two standard approaches to value Magnit – Discounted Cash Flow (DCF) model and multiples valuation.

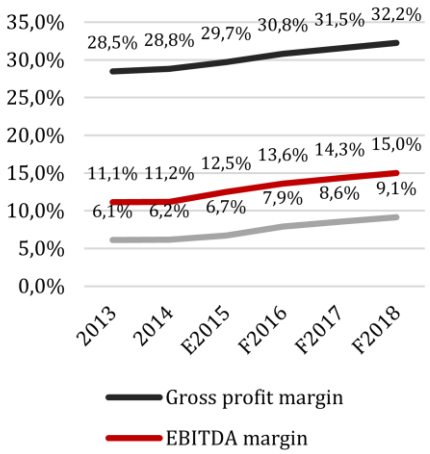
DCF valuation

According to our DCF analysis, we expect the target price of share 11 712 RUB offering 13.2% upside potential and the target price of GDR 2 449 RUB offering 4.4% downside potential. The DCF model is sensitive mostly to the following factors:

Sales

We project average annual sales area absolute growth to be equal to 745 thousand sq. m. We believe it is possible for Magnit to maintain the level because of high potential of Russian food retail growth. However, due to unfavorable macroeconomic conditions the productivity of sale area growth is expected to decrease in 2016. Like-for-like real sales growth is also projected to decrease. To sum up, we assume that Magnit will continue its expansion and will be able to maintain the high level of new stores openings, but recession decreases its productivity for real revenue generating.

Figure 14: Margins Dynamics



Source: Company data, Team estimates

Gross margin

We assume that Magnit gross margin will continue to grow because of investments in vertical integration level increase. In our opinion, the major factors influencing gross margin growth are centralization level and own vegetables production. We project centralization level to increase annually by 0.6% by 2020, what leads to annual decline in COGS to sales ratio by 0.3%. According to our estimates, growing own vegetables can help to take 21.5% margin from third party vegetables producers. The expected overall effect of Magnit vertical integration development policy – 32.2% gross margin level in 2020.

Terminal growth

We believe that Magnit has a potential to grow in terminal period (Appendix G) that is why it is necessary to calculate terminal growth rate. Since Magnit has left aggressive investment strategy, we assume it to have a zero real growth in terminal period. Therefore, our assumed terminal growth rate is equal to 5.1% – MED long-term inflation projection.

WACC

We employed build-up approach for estimating cost of equity, because Magnit operates on the emerging market, and traditional approaches applying can lead to biased estimated. We utilized 30-year US government bond yield as risk-free rate of 2.8%, country risk premium based on Russian default spread and relative equity to bond market volatility of 2.4% (Damodaran), equity risk premium of 7.0% (Ibbotson Valuation Yearbook 2015), food retail risk-premium of (0.9%) (Ibbotson Valuation Yearbook 2015), size premium of 0.6% (Ibbotson Valuation Yearbook 2015, premium for companies with market capitalization from 10 to USD24 billion) and specific risk premium of 0.0% (in our model it is determined as a difference between Russian default spread and Magnit default spread corrected on relative equity to bond market volatility).

The cost of equity is assumed to be 11.2%. The after-tax cost of debt is assumed to be 4.1% (based on Magnit default spread and average corporate to sovereign bonds yields ratio). The more detailed description is presented in Appendix H.

Multiples valuation

Multiples valuation results are consistent with DCF analysis conclusions supporting our HOLD recommendation. According to peer group valuation, the intrinsic value of share is expected to be RUR10,281 offering 0.7% downside potential, the intrinsic value of share – RUR2,056 offering 16.0% downside potential (Appendix K).

Multiples valuation was focused on the current and forward values of P / E and EV / EBITDA multiples. The four Russian companies operating in food retail industry were employed as a peer group. For every multiple the intrinsic value was the calculated, and the final price was determined as the average value (due to uncertainty of macroeconomic conditions and, subsequently, of our projections we did not set higher weights to forward multiples).

Financial Analysis

High level of Credit Worthiness

Magnit has a high level of credit worthiness, it is assigned "BB+" credit rating S&P (the highest credit rating, which a Russian company can have, because sovereign credit rating is at the same level). Besides, Magnit has the smallest leverage among the peers, its 1H 2015 Net debt / EBITDA value is equal to 0.9 whereas the average value among competitors is equal 2.5. According to company announcements, Magnit is not willing to increase the leverage. Because of EBITDA margin growth we project Net debt / EBITDA to decrease. Besides, Magnit has a law value of interest coverage ratio of 10.2 (2014). According to Damodaran credit synthetic rating, it is a very high value and indicates a high level of credit worthiness. We project decline of the ratio in 2015 due to interest rates rise, but since 2016 it is expected to return to the same level and continue to increase.

Table 4: WACC components

Risk-free rate	2,8%
CRP	2,4%
ERP	7,0%
ERP (food retail)	-0,9%
Specific risk premium	0,0%
Size premium	0,6%
Cost of debt	5,2%

Source: Bloomberg, Damodaran, Ibbotson, Team estimates

Further ROE growth

Magnit has the highest ROE of 42.8% comparing to peers (the average value among peers is equal to 20%), in spite of the fact that the Magnit leverage is the smallest. The reason is a high level of net income margin, which increase is caused with vertical integration development. We project ROE to continue growing, as the company plans to increase the centralization level and develop own vegetables production.

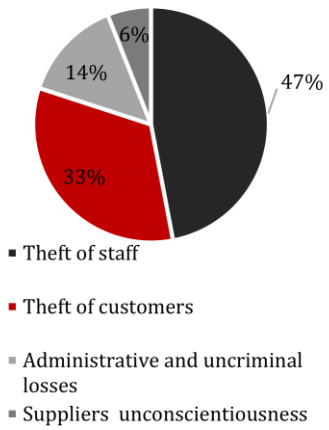
Decline in investment activity

2014 was the first year when FCFF of the company became positive. The FCFF has grown, because company decreased its investment activity. CAPEX as a share of revenue started to decrease since 2013. We project CAPEX to revenue ratio again increase in 2015 due to high level of prices rise, but in 2016 it is expected to return to the previous level.

GDR is traded with premium comparing to share

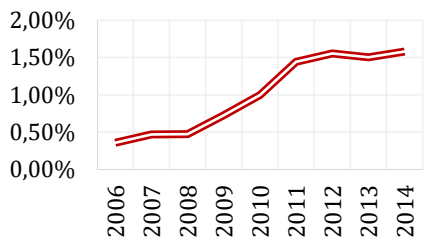
GDR is traded with premium of 18.3% comparing to share price. The premium arises, because there are limits on share to GDR convertation, and now these limits are reached.

Figure 15: Structure of Russian retailers' losses



Source: The Smart Cube and Checkpoint Systems survey

Figure 16: Share of losses due to inventory shortages in revenue

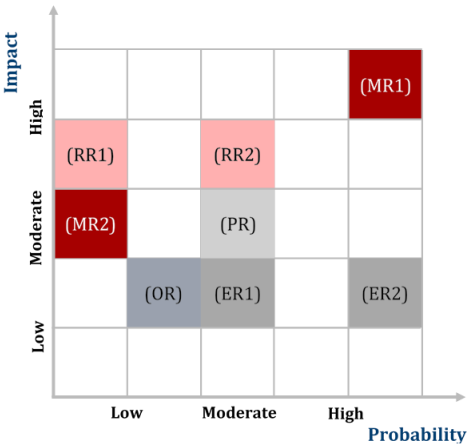


Source: Company data

Figure 17: Real wage growth rate dynamic

Source: The Ministry of Economic Development

Figure 18: Risk Matrix



Source: Team estimates

Investment Risks

The probability of risks mentioned below and its possible influence on Magnit's capitalization are presented in Figure 18and Appendix O.

Operational risk

Further share growth of loses due to inventory shortages (OR)

According to The Smart Cube and Checkpoint Systems, inventory losses of Russian stores from September 2014 to September 2015 amounted to USD6.17 billion. The losses include theft, errors of accounting, pricing and inventory management, as well as the actions of unscrupulous suppliers. Most of the losses accounted for theft by employees (Figure 15). During last years, the share of Magnit's inventory losses has been growing and has reached 2% share of revenue in 2014 (Figure 16). Russian law does not recognize retailers' inventory losses as expenses deductible from taxable base and allows excluding only 0.75% of revenue as losses due to inventory shortages. Thus, Magnit may continue to incur losses and, at the same time, pay extra taxes them, reducing Company net profit.

Regulatory risk

Direct import prohibition (RR1)

In February 2015 news announced that Russian deputies are going to develop a bill that may prohibit retail chains to directly supply agricultural products from abroad. The necessity of such regulation can be explained by the fact that Russian retail chains prefer to buy food directly from foreign suppliers, while it is harmful for local farmers' interests. Russian suppliers are excluded from the supply chain. Direct purchases of imported goods, that is, without any intermediaries, allow chains to reduce the cost of goods on the shelves. In addition, direct contracts can provide greater freedom of supplier choice, and in some cases enhance the reliability of delivery time and volume. The introduction of such restrictions causes a risk of margins decrease and, consequently, in prices of imported products increase or products range reduction.

Suppliers bonuses and payment delay reduction (RR2)

In January 2015 a deputies group proposed amendments to the act «About trade» that, firstly, implies a decrease in the maximum permitted size of retro-bonus from 10 to 3% of supply amount with the prohibition of any additional payments to retail chains by suppliers and, secondly, a reduction of the payment delay of goods delivered to a retailer. The Ministry of Industry and Trade supported the second amendment about payment delay. In spite of the Ministry of Industry and Trade's negative opinion regarding the first novelty, in May 2015 a bill was passed in the first reading. Surprisingly, for the second reading the Ministry has offered to totally prevent payments of any possible compensation, including retro-bonuses. The second reading postponed from month to month. Moreover, The Ministry of Economic Development warns that this will lead to a redistribution of the financial burden from suppliers to consumers and, consequently, higher prices. In the case of the entry into legal force of the amendments, margins of large retailers, including Magnit, will be significantly reduced.

Market risk

Increase in competition (MR1)

The retail sector is highly competitive. The existing market leaders are not going to weaken the struggle for market share. Since a consumer can easily change the place of purchases, retailer sales are very sensitive to competitor actions. Even an increase in competitor working hours who is close to Magnit points of sales, can lead to customers outflow. The entry of new players into the market is not excluded. High growth potential in the trade sector attracts new players, which increases the competition level. This threat is mitigated by current economic conditions. Interest rates on loans for businesses are still high enough, while credit conditions have significantly tightened compared to the pre-crisis period. Nevertheless, in the case of Russia's recession recovery, we can expect active retail market revival.

Risk of changes of lease terms (MR2)

Currently, Magnit leases approximately 80% of its space. In the cases of signing long-term leases premises owners have the right to change the rates, within the limits agreed in law. Since Magnit leases most of its space, small changes in the lease terms may have a negative effect on economic activity and financial situation of the Company.

Political risk

Russian political situation deterioration (PR)

Recently the political events have begun to play a crucial role in the retail chains activities. Russian conflicts with foreign countries have begun to be accompanied by sanctions primarily on the daily demand products. One of the latest such event was the Turkey's embargo, which Russian retailers forced to quickly search for new suppliers and sign less favorable contracts in order to keep the product range. Despite the fact that the share of directly imported Magnit's products is 10%, the Company supplies from abroad one more share of goods through intermediaries and its Russian suppliers are also dependent on the price of imports.

Economic risk

Currency risk (ER1)

Since Magnit operates directly with foreign suppliers, contracts are usually signed in a currency other than the functional. Such contracts are 10% of goods direct import and contracts for purchases of foreign trucks, which are used for product transoptation. Despite the fact that during the period from the contract signing to the entry into force its value may change due to currency fluctuations (ruble exchange rate fluctuation in 2015 was 6 RUR/USD), Magnit does not hedge foreign exchange risk. We suppose that the Company has a policy of signing quick contracts, the period from the signing to performance for which is the minimum. However, in this case the Company is not protected against major currency fluctuations, which is probably enough in the current crisis.

Disclosures:

Ownership and material conflicts of interest:

The author(s), or a member of their household, of this report does not hold a financial interest in the securities of this company.

The author(s), or a member of their household, of this report does not know of the existence of any conflicts of interest that might bias the content or publication of this report.

Receipt of compensation:

Compensation of the author(s) of this report is not based on investment banking revenue.

Position as a officer or director:

The author(s), or a member of their household, does not serve as an officer, director or advisory board member of the subject company.

Market making:

The author(s) does not act as a market maker in the subject company's securities.

Disclaimer:

The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with CFA Association (Russia), CFA Institute or the CFA Institute Research Challenge with regard to this company's stock.

CFA Institute

CFA Institute Research Challenge

Appendix A: Historical and Projected Income Statements

In RUR million	2013	2014	E2015	F2016	F2017	F2018	F2019	F2020
Sales	579,695	763,527	948,835	1,151,255	1,373,677	1,608,098	1,867,902	2,156,329
Cost of sales	(414,543)	543,546	(667,008)	(796,464)	(940,528)	(1,089,577)	(1,252,371)	(1,430,563)
Gross profit	**165,152**	**219,982**	**281,827**	**354,792**	**433,149**	**518,522**	**615,531**	**725,766**
SG&A	(101,730)	(134,170)	(162,384)	(197,026)	(235,092)	(275,211)	(319,674)	(369,035)
Other expenses	(374)	(579)	(654)	(793)	(946)	(1,108)	(1,287)	(1,486)
Other income	1,904	2,892	3,144	3,815	4,552	5,328	6,189	7,145
Foreign exchange gain (loss)	(351)	(2,814)	(6,488)	(400)	50	166	0	0
EBITDA	**64,600**	**85,311**	**115,446**	**160,387**	**201,712**	**247,698**	**300,760**	**362,390**
D&A	(14,184)	(17,610)	(22,978)	(27,880)	(33,266)	(38,943)	(45,235)	(52,220)
EBIT	**50,416**	**67,701**	**92,468**	**132,507**	**168,446**	**208,755**	**255,525**	**310,171**
Interest expenses	(4,969)	(6,646)	(13,663)	(11,908)	(12,351)	(13,589)	(14,269)	(14,139)
Interest income	187	372	438	531	634	742	862	995
EBT	**45,633**	**61,427**	**79,242**	**121,130**	**156,729**	**195,908**	**242,118**	**297,026**
Tax expenses	(10,107)	(14,202)	(17,839)	(27,269)	(35,284)	(44,104)	(54,507)	(66,868)
Net income	**35,526**	**47,225**	**61,403**	**93,861**	**121,445**	**151,804**	**187,611**	**230,158**

Source: Company data, Team estimates

Appendix B: Historical and Projected Balance Sheets

In RUR million	2013	2014	E2015	F2016	F2017	F2018	F2019	F2020
PPE	189,904	159,106	260,382	315,930	376,968	441,298	512,594	591,745
Other non-current assets	5,607	4,128	5,386	6,535	7,798	9,128	10,603	12,240
Total non-current assets	**195,511**	**163,234**	**265,768**	**322,465**	**384,765**	**450,427**	**523,197**	**603,985**
Inventories	54,585	55,644	73,104	88,699	105,836	123,897	143,914	166,136
Accounts receivable	615	555	921	1,118	1,334	1,562	1,814	2,094
Other current assets	4,478	3,939	9,838	11,937	14,243	16,674	19,367	22,358
Cash and cash equivalents	5,771	12,082	16,063	19,490	23,255	27,223	31,622	36,504
Total current assets	**65,449**	**72,221**	**99,926**	**121,244**	**144,668**	**169,356**	**196,717**	**227,092**
Total assets	260,960	235,455	365,694	443,709	529,433	619,782	719,914	831,078
Total equity	**122,765**	**98,107**	**162,989**	**197,761**	**235,968**	**276,236**	**320,865**	**370,411**
ST debt	35,342	35,006	48,741	59,139	70,564	82,606	95,952	110,768
Accounts payable	46,874	45,617	68,907	83,607	99,760	116,784	135,652	156,598
Other current liabilities	11,311	19,143	19,992	24,257	28,943	33,883	39,357	45,434
Total current liabilities	**93,527**	**99,767**	**137,640**	**167,003**	**199,268**	**233,273**	**270,961**	**312,800**
LT debt	36,434	30,330	53,899	65,397	78,032	91,348	106,106	122,490
Other non-current liabilities	8,234	7,251	11,166	13,548	16,166	18,925	21,982	25,376
Total non-current liabilities	**44,668**	**37,581**	**65,065**	**78,945**	**94,198**	**110,273**	**128,088**	**147,867**
Total equity and liabilities	**260,960**	**235,455**	**365,694**	**443,709**	**529,433**	**619,782**	**719,914**	**831,078**

Appendix C: Historical and Projected Cash Flow Statements

In RUR million	2013	2014	E2015	F2016	F2017	F2018	F2019	F2020
EBT	45,633	61,427	79,242	121,130	156,729	195,908	242,118	297,026
D&A	14,184	17,610	22,978	27,880	33,266	38,943	45,235	52,220
Interest expenses	4,969	6,646	13,663	11,908	12,351	13,589	14,269	14,139
Interest income	(187)	(372)	(438)	(531)	(634)	(742)	(862)	(995)
Foreign exchange gain (loss)	351	2,814	6,488	400	(50)	(166)	0	0
Other adjustments for EBT	22	22	25	38	50	62	77	94
Operating cash flows before WC changes	**64,974**	**88,147**	**121,958**	**160,825**	**201,712**	**247,593**	**300,837**	**362,484**
WC changes	(8,487)	(6,947)	(7,827)	(9,497)	(11,332)	(13,265)	(15,409)	(17,788)
Cash generated from operations	**56,487**	**81,200**	**114,131**	**151,328**	**190,381**	**234,328**	**285,428**	**344,697**
Income tax paid	(8,012)	(12,413)	(14,524)	(22,201)	(28,726)	(35,907)	(44,377)	(54,441)
Interest paid	(4,759)	(6,807)	(13,942)	(12,151)	(12,603)	(13,866)	(14,560)	(14,428)
Interest received	209	375	444	539	643	753	874	1,009
Net cash generated from operating activities	**43,925**	**62,354**	**86,109**	**117,515**	**149,694**	**185,307**	**227,365**	**276,837**
CAPEX	(50,074)	(55,730)	(78,039)	(84,496)	(90,495)	(96,171)	(98,333)	(104,996)
Other cash flows from investing activities	(2,116)	650	(1,264)	(1,534)	(1,830)	(2,143)	(2,489)	(2,873)
Net cash generated from investing activities	**(52,190)**	**(55,081)**	**(79,304)**	**(86,030)**	**(92,325)**	**(98,313)**	**(100,822)**	**(107,870)**
Debt proceeds	256,771	352,193	386,677	469,168	559,811	655,345	761,222	878,764
Debt repayment	(246,984)	(330,222)	(364,456)	(442,208)	(527,642)	(617,685)	(717,478)	(828,265)
Dividends paid	(9,363)	(16,243)	(15,747)	(24,071)	(31,145)	(38,931)	(48,113)	(59,025)
Other cash flows from financing activities	1,537	1,958	11,318	(30,548)	(54,678)	(81,921)	(117,775)	(155,559)
Net cash generated from financing activities	**1,961**	**7,686**	**17,792**	**(27,658)**	**(53,653)**	**(83,192)**	**(122,145)**	**(164,085)**
Effect of FX rates on cash and cash equivalents	(673)	(8,649)	(20,617)	(400)	50	166	0	0
Net change in cash and cash equivalents	**(6,976)**	**6,311**	**3,980**	**3,427**	**3,765**	**3,968**	**4,398**	**4,883**

Source: Company data, Team estimates

Appendix D: Magnit Key Executives

Executive	Title	Magnit Career History	Description
Khachatur Pombukhchan	Chairman of the Board, Magnit Finance Director	Chairman of the Board of Directors since 2010 Board member since 2008	Mr. Pombukhchan has been the Board of Directors' Chairman since 2010. Since 2008 he served as Finance Director of ZAO Tander. From 2006 to 2008 he was Marketing Director at ZAO Tander. In 2008 he was appointed General Director at OOO Magnit Finans. In 2008-2009 Mr. Pombukhchan was Member of the Board of Directors at OOO Magnit Nizhniy-Novgorod and at OOO Tandem.
Sergey Galitskiy	General Director (CEO) , Chairman of the Management Board, Director, Member of the Board of Directors	General Director since 2006 Chairman of the Management Board since 2010 Board member since 2004	Mr. Galitskiy is the Founder and Co-owner of PAO Magnit. He has served as General Director at PAO Magnit since 2006 and Member of the Board since 2004. From 1996 to 2006 he was General Director in ZAO Tander. He also served as Member of the Board of Directors in ZAO Tander between 2002 and 2006.
Aslan Shkhachemukov	Deputy Chairman of the Board	Deputy Chairman of the Board of Directors since 2014 Board member since 2011	Mr. Shkhachemukov has been Deputy Chairman of the Board of Directors at PAO Magnit since 2014. He has also been Member of the Company's Board of Directors since 2011. He was appointed Deputy General Director for Economical Safety and Organizational Issues at ZAO Tander in 2012. He was Deputy General Director at ZAO Tander ZAO from 2007 to 2012. He was Chairman of the Board of Directors at OAO Kubanskiy Standart from 2004 to 2007.
Aleksandr Barsukov	Deputy Chairman of the Management Board	Deputy Chairman of the Management Board since 2013 Member of the Management Board since 2010	Mr. Barsukov has served as Deputy Chairman of the Management Board at PAO Magnit since 2013. He has been Member of the Management Board at the Company since 2010. In 2012, he was appointed Director of Sales Department at ZAO Tander. From 2008 to 2012 he served as Director of Supermarkets Sales at ZAO Tander. From 2006 to 2008, he served as Director of Branch at the same company. He was also Head of the Sales Department at ZAO Tander from 2006 to 2008.
Andrey Arutyunyan	First Deputy General Director, Director, Secretary of the Board of Directors	First Deputy General Director since 2003 Board member since 2008 Secretary of the Board of Directors since 2011	Mr. Arutyunyan has been First Deputy General Director at PAO Magnit since 2003. Since 2008 he has been Member of the Company's Board of Directors. Since 2011 he has served as Secretary of the Board of Directors at the Company. From 2004 to 2008 he was Chairman of the Company's Board of Directors. Also, in 2009, he was appointed Deputy General Director for Development at ZAO Tander. He was Deputy Director for Commerce at OOO Biryza from 2002 to 2004. He became Member of the Board of Directors at OOO Magnit Nizhny-Novgorod in 2006.
Marina Ivanova	Member of the Management Board	Board member since 2012	Ms. Ivanova has been Member of the Management Board at PAO Magnit since 2012. She became Commerce Director at in 2008. She was Director for Corporate Purchase at ZAO Tander from 2007 to 2008.
Ilya Sattarov	Member of the Management Board	Member of the Management Board since 2012	Mr. Sattarov has been Member of the Management Board at PAO Magnit PAO since 2012. He became Deputy General Director for Logistics at ZAO Tander in 2011. In 2011, he was also its Director for Transportation. He served at ZAO Tander as Director for Acquisition and Assets Management from 2010 to 2011. He was General Director of ZAO Bank Societe Generale Vostok.

Executive	Title	Magnit Career History	Description
Aleksandr Aleksandrov	Member of the Board of Directors, Member of Staff and Compensation Committee	Member of the Board of Directors since 2015	Mr. Alexandrov became a candidate for Board of Directors in 2015. He is also a member of Staff and Compensation Committee.
Aleksey Pshenichnyi	Member of the Board of Directors, Chairman of the Staff and compensations Committee	Member of the Board of Directors since 2014	Mr. Pshenichnyi became a candidate for Board of Directors in 2014. Earlier he was the owner of sporting goods stores network and organized sport events in Krasnodar. Mr. Pshenichnyi got MBA in Moscow in 2004.
Aleksandr Zayonts	Member of the Board of Directors, Chairman of the Audit Committee, Member of Staff and Compensation Committee	Board member since 2010	Mr. Zayonts has been Member of the Board of Directors at PAO Magnit since 2010. He is also Chairman of the Company's Audit Committee and Member of the Human Resources and Compensation Committee of the Company. He was appointed General Director at OOO Domashniy inter'er in 2008. In 2009 he became Member of the Board of Directors at OOO Ob'edinennye resursy. He held the post of Vice President and Member of the Board of Directors at OAO M. Video from 2003 to 2007.
Timothy Post	Director of Investor Relations Department	Director of Investor Relations Department since 2012	Mr. Post occupies position of Head of Investor Relations since 2012. During 2010-2012 he was a managing partner at Runet Labs in Krasnodar, a venture firm that launched local start-ups. In 2007-2010 he was a Vice President of Strategy & Development in Krasnodar developer firm. Earlier he led a finance career as CFO, Controller and Consultant.

Source: Reuters

Appendix E: Broad Structure

Subdivision	№	Name
Board of directors	1	Pombukhchan Khachatur Eduardovich – chairman
	2	Arutyunyan Andrey Nikolaevich
	3	Galitskiy Sergey Nikolaevich
	4	Zayonts Alexander Leonidovich
	5	Aleksandrov Aleksandr Vitalievich
	6	Pshenichniy Alexey Alexandrovich
	7	Shkhachemukov Aslan Yurievich
Audit committee of the board of directors	1	Zayonts Alexander Leonidovich – chairman
	2	Aleksandrov Aleksandr Vitalievich
	3	Pshenichniy Alexey Alexandrovich
Staff and compensations committee of the board of directors	1	Pshenichniy Alexey Alexandrovich – chairman
	2	Zayonts Alexander Leonidovich
	3	Aleksandrov Aleksandr Vitalievich
Management Board	1	Galitskiy Sergey Nikolaevich – chairman
	2	Barsukov Alexander Pavlovich
	3	Ivanova Marina Alexeevna
	4	Sattarov Ilya Karimovich
Chief executive officer		Galitskiy Sergey Nikolaevich

Source: Company data

Appendix F: Regression analysis of food retail industry real revenue growth

The regression analysis was done to find out whether the factors, which are considered to influence food retail industry growth, really have a statistically significant impact on food retail industry real revenue growth.

The following data were employed: quarterly values of food retail industry real revenue growth, real wage growth and average CBR key interest rate for the time period between 3Q 1998 and 3Q 2015 (64 observations).

The dependent variable – food retail industry real revenue growth. The independent variables – real wage growth, average CBR key interest rate.

Variable	Coefficient
Real wage growth	0.61^{***}
Average CBR key interest rate	-0.13^{***}
Constant	0.03^{***}
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$ $R^2 = 0.85$ F-test p-value < 0.01	

Source: Team estimates

According to the results, the analysed factors have a statistically significant impact on food retail industry real revenue growth.

Appendix G: Regression analysis of European countries sales area growth

The regression analysis was done to find out whether retail industries in countries with smaller values of selling space per capita grow faster than the ones with higher values.

The following data were employed: 28 European countries values of sales area per capita in 2012 and values of sales area growth in 2013.

The dependent variable – sales area growth in the next year. The independent variable – sales per capita in the current year.

Variable	Coefficient
Sales per capita in the current year	-0.3^{**}
Constant	0.05^{***}
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$ $R^2 = 0.19$ F-test p-value = 0.02	

Source: Team estimates

According to the results, sales per capita in the current year has a statistically significant impact on sales area growth in the next year. Besides, the sign of the coefficient is negative. Subsequently, the hypothesis is correct.

Appendix H: DCF assumptions

Sales
In our analysis we divided sales growth into like-for-like (LFL) sales growth and new stores sales growth (requiring new investments), because different factors influence them.

Sales growth = Comparable stores sales growth + New stores sales growth

LFL sales growth
We divided LFL sales growth into growth related to volume of sales and growth related to prices changes.

LFL sales growth = (1 + LFL volume of sales growth) * (1 + Average food retail industry inflation) – 1

We assume that LFL volume of sales growth is correlated with food retail industry real growth, because LFL real sales growth is a growth generated with mature stores and it can be influenced with the factors familiar to the ones determining food retail industry dynamics.

For testing the hypothesis we did regression analysis. The dependent variable was LFL volume of sales growth and the independent variable was food retail industry volume of sales growth. The regression was estimated on the annual data recorded over the period between 2006 and 2015.

Variable	Coefficient
Food retail industry volume of sales growth	0.54***
Constant	-0.02
*** p < 0.01; ** p < 0.05; * p < 0.1 R^2 = 0.72 F-test p-value < 0.01	

Source: Team estimates

According to the results, the correlation between factors is statistically significant, what proves the hypothesis. Besides, the sign of the coefficient is positive. Subsequently, the hypothesis is correct.

As a result, the regression was employed for forecasting LFL volume of sales growth. Besides, MED projections of food retail industry volume of sales growth and average food retail industry inflation were employed.

	2016	2017	2018	2019	2020
Food retail industry volume of sales growth	0.4%	2.1%	2.3%	2.3%	2.3%
LFL volume of sales growth	*0.54 * 0.4% – 0.02 =* -1.7%	-0.8%	-0.7%	-0.7%	-0.7%
Average food retail industry inflation	7.0%	5.7%	5.1%	5.1%	5.1%
LFL sales growth	*(1 – 1.0%) * (1 + 7%) =* 5.2%	4.9%	4.4%	4.4%	4.4%

Source: MED, Team estimates

New stores sales growth
As in the case of LFL sales, we divided new stores sales growth into growth related to volume of sales and growth related to prices changes.

New stores sales growth = (1 + New stores volume of sales growth) * (1 + Average food retail industry inflation) – 1

We assume that new stores volume of sales growth is influenced with average selling space growth. Therefore, new stores productivity factor was employed.

New stores productivity = Volume of new stores sales growth / Average selling space growth

We also assume that new stores productivity varies, if macroeconomic conditions vary. According to our regression analysis of volume of food retail industry sales growth (Appendix F), the main factor influencing demand in retail industry is a real wage growth. Subsequently, we assume that the higher real wage growth the higher new stores productivity.

For testing the hypothesis we did regression analysis. The dependent variable was new stores productivity and the independent variable was real wage growth. The regression was estimated on the annual data recorded over the period between 2006 and 2015.

Variable	Coefficient
Real wage growth	2.2**
Constant	0.5***
*** p < 0.01; ** p < 0.05; * p < 0.1 R^2 = 0.4 F-test p-value = 0.05	

Source: Team estimates

According to the results, real wage growth has a statistically significant impact on new stores productivity. Besides, the sign of the coefficient is positive. Subsequently, the hypothesis is correct.

As a result, the regression was employed for forecasting new stores productivity. Besides, MED projections of real wage growth were employed.

	2016	2017	2018	2019	2020
Real wage growth	-0.2%	2.9%	3.1%	3.1%	3.1%
New stores productivity	*2.2 * (-0.2%) + 0.5 =* 0.46	0.53	0.53	0.53	0.53

According to the Company's plans, Magnit is going to increase the average selling space by 745 thousand sq. m. in 2015. We assume that Magnit will continue to increase annually the average selling space by 745 thousand sq. m. until 2020.

Russia has a potential for food retail industry growth. The value of selling space per capita in Russia is equal to 0.69 in 2014, which is considered to be one of the smallest values among European countries (the average value among European countries is equal to 1.12). Moreover, according to our regression analysis (Appendix G), retail industries in countries with smaller values of selling space per capita grow faster than the ones with higher values.

Besides, if we assume that retail selling space continues to grow annually by 3.1% (the average value for the last 3 years) and population continues to grow annually by 0.2% (the average value for the last 3 years), the value of selling space per capita will be equal to 0.82 by 2020, which is still less than the average value among European countries. Therefore, it is possible for Magnit to maintain the average selling space absolute growth at the same level.

	2016	2017	2018	2019	2020
New stores productivity	0.46	0.53	0.53	0.53	0.53
Average selling space growth	18.7%	15.8%	13.6%	12.0%	10.7%
New stores volume of sales growth	*18.7% * 0.46 =* 8.6%	8.3%	7.2%	6.4%	5.7%
Average retail industry inflation	7.0%	5.7%	5.1%	5.1%	5.1%
New stores sales growth	*(1 + 8.6%) * (1 + 7%) =* 16.2%	14.5%	12.7%	11.8%	11.1%

Sales growth

	2016	2017	2018	2019	2020
LFL sales growth	5.2%	4.9%	4.4%	4.4%	4.4%
New stores sales growth	16.2%	14.5%	12.7%	11.8%	11.1%
Sales growth	*5.2% + 16.2% =* 21.3%	19.3%	17.1%	16.2%	15.4%

Cost of goods sold

Cost of goods sold is projected as a share of revenue. Historically it was decreasing, in our opinion, the reasons are the following: increasing centralization level (share of own deliveries), private label development, direct import development, own production (greenhouses) development. We assume that Magnit will continue to increase vertical integration level in the 2 directions: centralization level increasing and own production development. According to the Company announcements, it has reached a peak at private label development (share of private label in revenue decreases since 2012), because it is difficult for company to find new producers securing needed volume of products. Share of direct import in revenue has been stable since 2013. Besides, current macroeconomic conditions make difficult direct import development.

Centralization level effect

We estimated centralization level effect on COGS to sales ratio with the help of factor centralization level increase productivity.

Centralization level increase productivity = Change in COGS to sales ratio / Change in centralization level

We assumed that centralization level increase productivity depends on macroeconomic conditions, because they can influence margin, which third party wholesalers charge for their services.

For testing the hypothesis we did regression analysis. The dependent variable was centralization level increase productivity and the independent variable was real GDP growth. The regression was estimated on the annual data recorded over the period between 2007 and 2014.

Variable	Coefficient
Real GDP growth	-6.7
Constant	-0.8**
*** p < 0.01; ** p < 0.05; * p < 0.1 R^2 = 0.21 F-test p-value = 0.25	

According to the results, real GDP growth does not have a statistically significant impact on centralization level increase productivity. As a result, we assumed centralization level increase productivity to be constant and projected it as the average value – -0.56. Magnit plans to increase centralization level to 89.4%. We assume that Magnit will reach the goal by 2020 increasing centralization level annually by 0.6%. To sum up, increase in centralization level annually by 0.6% is assumed to decrease COGS to sales ratio by 0.3% (0.6% * 0.56).

Vegetables production effect

Due to the small number of observations it is difficult to implement the same procedure for estimating vegetables production effect. We projected the effect basing on the following assumptions:

- The share of vegetables sold in revenue is equal to 2.2% (average share of population expenditures on vegetables in total expenditures, GKS);
- Margin of vegetables producers, which Magnit takes growing own vegetables, is equal to 21.5% (average margin of vegetables producers, Team estimates based on Bloomberg data);
- Magnit will annually open 20 ha of greenhouses (based on historical data and Company announcements) and by 2018 it will serve the needs in vegetables by 100%.

COGS to sales ratio projections

	2016	2017	2018	2019	2020
COGS to sales ratio	64.7%	63.9%	63.2%	62.5%	61.8%

CAPEX

CAPEX projections are based on assumption that Magnit needs to invest in new stores openings, centralization level increase, building greenhouses, technical support and repair of stores, stores buy-backs. Besides, for projecting the needed investments building industry, machinery and equipment producing industry, real estate industry inflation indexes were employed.

Terminal growth

We believe that Magnit has a potential to grow in terminal period that is why it is necessary to use terminal growth rate. We assume terminal growth to be equal to 5.1%, MED long-term inflation projection.

WACC

Factor	Value	Formula	Source
Risk-free rate	2.8%	-	T-bond yield, 30y
Country risk premium	2.4%	Country default spread * 1.5	Damodaran
Equity risk premium	7.0%	-	Ibbotson SBBI Valuation Yearbook 2015
Food retail industry premium	-0.9%	-	Ibbotson SBBI Valuation Yearbook 2015
Specific risk premium	0.0%	(Country default spread – Company default spread) * 1.5	Team estimates
Size premium	0.6%	-	Ibbotson SBBI Valuation Yearbook 2015
Cost of equity, $	11.9%	-	Team estimates
Corporate bond yield / Sovereign bond yield	1.2	Average corporate bond yield / Sovereign bond yield with the same rating	Team estimates based on Bloomberg data
Company default spread	1.6%	-	Damodaran
Effective tax rate	22.5%	-	Team estimates
Cost of debt, $	4.1%	-	Team estimates
Financial leverage	0.1	Average 2015 market cap / 2015 Book debt	Team estimates
WACC, $	11.2%	-	Team estimates
Interest rate, RUR	11.1%	-	Russia Government bond, Rub., maturity date - 19.01.2028
Interest rate, $	6.5%	-	Russia Government bond, $, maturity date - 24.06.2028
WACC, RUR	16%	-	Team estimates

Appendix I: DCF analysis

	2016	2017	2018	2019	2020
Cash flows before WC changes, mln. RUR	139,866	174,565	213,554	258,594	310,508
WC changes, mln. RUR	(9,497)	(11,332)	(13,265)	(15,409)	(17,788)
CAPEX mln. RUR	(84,211)	(90,034)	(95,538)	(97,526)	(103,987)
FCFF, mln. RUR	46,158	73,199	104,751	145,660	188,733
WACC, %	16.0%	16.0%	16.0%	16.0%	16.0%
DCFF, mln. RUR	39,781	54,369	67,054	80,359	89,735

Source: Team estimates

Terminal growth	5.1%
Terminal WACC	16.0%
PV of FCFF, mln. RUR	331,298
Terminal value, mln. RUR	1,814,520
PV of terminal Value, mln. RUR	862,736
EV, mln. RUR	1,194,034
Net debt, mln. RUR	86,576
Value of equity, mln. RUR	1,107,458
Shares outstanding, mln.	94.6
Share target price, RUR	11,712
GDR target price, RUR	2,342
Share price, 20th January of 2016, RUR	10,350
Upside (downside) potential	13.2%
GDR price, 20th January of 2016, RUR	2,449
Upside (downside) potential	(4.4%)

Source: Team estimates

Appendix J: Sensitivity analysis

Share price
Intrinsic value sensitivity analysis

Terminal growth	**WACC**						
	13.0%	**14.0%**	**15.0%**	**16.0%**	**17.0%**	**18.0%**	**19.0%**
3.6%	14,797	13,081	11,673	10,496	9,500	8,647	7,908
4.1%	15,523	13,651	12,129	10,867	9,806	8,902	8,124
4.6%	16,335	14,281	12,629	11,271	10,137	9,177	8,354
5.1%	17,249	14,982	13,179	11,712	10,496	9,473	8,601
5.6%	18,286	15,766	13,787	12,194	10,886	9,793	8,867
6.1%	19,473	16,648	14,464	12,726	11,312	10,140	9,153
6.6%	20,844	17,649	15,220	13,313	11,778	10,517	9,463

Source: Team estimates

Upside (downside) potential sensitivity analysis

Terminal growth	**WACC**						
	13.0%	**14.0%**	**15.0%**	**16.0%**	**17.0%**	**18.0%**	**19.0%**
3.6%	43.0%	26.4%	12.8%	1.4%	-8.2%	-16.5%	-23.6%
4.1%	50.0%	31.9%	17.2%	5.0%	-5.3%	-14.0%	-21.5%
4.6%	57.8%	38.0%	22.0%	8.9%	-2.1%	-11.3%	-19.3%
5.1%	66.7%	44.8%	27.3%	13.2%	1.4%	-8.5%	-16.9%
5.6%	76.7%	52.3%	33.2%	17.8%	5.2%	-5.4%	-14.3%
6.1%	88.1%	60.9%	39.7%	23.0%	9.3%	-2.0%	-11.6%
6.6%	101.4%	70.5%	47.1%	28.6%	13.8%	1.6%	-8.6%

GDR price
Intrinsic value sensitivity analysis

Terminal growth	WACC						
	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%	19.0%
3.6%	2,959	2,616	2,335	2,099	1,900	1,729	1,582
4.1%	3,105	2,730	2,426	2,173	1,961	1,780	1,625
4.6%	3,267	2,856	2,526	2,254	2,027	1,835	1,671
5.1%	3,450	2,996	2,636	2,342	2,099	1,895	1,720
5.6%	3,657	3,153	2,757	2,439	2,177	1,959	1,773
6.1%	3,895	3,330	2,893	2,545	2,262	2,028	1,831
6.6%	4,169	3,530	3,044	2,663	2,356	2,103	1,893

Source: Team estimates

Upside (downside) potential sensitivity analysis

Terminal growth	WACC						
	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%	19.0%
3.6%	20.8%	6.8%	-4.7%	-14.3%	-22.4%	-29.4%	-35.4%
4.1%	26.8%	11.5%	-0.9%	-11.2%	-19.9%	-27.3%	-33.7%
4.6%	33.4%	16.6%	3.1%	-7.9%	-17.2%	-25.1%	-31.8%
5.1%	40.9%	22.4%	7.6%	-4.4%	-14.3%	-22.6%	-29.8%
5.6%	49.3%	28.8%	12.6%	-0.4%	-11.1%	-20.0%	-27.6%
6.1%	59.0%	36.0%	18.1%	3.9%	-7.6%	-17.2%	-25.2%
6.6%	70.2%	44.1%	24.3%	8.7%	-3.8%	-14.1%	-22.7%

Appendix K: Multiples valuation

For multiples valuation the four Russian companies operating in food retail industry were employed. We analyzed the current and forward P / E and EV / EBITDA multiples. The final intrinsic values were calculated with weighted summation. According to the results, multiples valuation supports our HOLD recommendation offering 0.7% downside for share and 16.0% downside for GDR.

Company	P / E			EV / EBITDA		
	LTM	E2015	F2016	LTM	E2015	F2016
X5 Retail Group	13.75	21.94	15.53	8.79	8.76	7.26
Dixy	29.19	23.47	10.72	5.13	4.98	4.03
O'Key	9.59	17.70	12.39	6.14	6.61	5.94
Lenta	4.64	21.88	15.14	12.69	10.42	8.29
Median	11.67	21.91	13.76	7.47	7.69	6.60
Share multiple	17.69	15.36	10.77	9.73	8.26	6.25
Intrinsic value	6 826	14 764	13 228	7 944	9 630	10 931
Weight	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%
Share intrinsic value, RUR	10,281					
Share price, 20th January of 2016, RUR	10,350					
Upside (downside) potential	(0.7%)					
GDR multiple	20.93	18.17	12.74	11.51	9.78	7.40
Intrinsic value	1,365	2,953	2,646	1,589	1,926	2,186
Weight	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%
GDR intrinsic value, RUR	2,056					
GDR price, 20th January of 2016, RUR	2,449					
Upside (downside) potential	(16.0%)					

Source: Bloomberg, Team estimates

Appendix L: Corporate Governance

To analyze corporate governance risks ISS Governance Quickscore rating is used where key points are estimated from 1 to 10 where 1 indicates lower governance risk and 10 indicates higher corporate governance risk. It should be initially noted that no major violations was committed by Magnit management, namely there were no records of delisting, no illegal net profit withdrawals, also there were no follow-on offerings diluting shareholders' stakes, finally there were no corporate raids.

KEY	
1	Insignificant threat to Shareholders
2	Low threat to Shareholders
3	Moderate threat to Shareholders
4	Significant threat to Shareholders
5	High Threat to Shareholders

Disclosure and transparency – 1
Company disclosures quarter and annual financial reports according to IFRS standards. Magnit has investor relations website, which is user-friendly, and all the relevant information, including legal documents, is well-presented to current and potential investors

Executive management - 1
Magnit has a clear strategy and vision of the future positions, which is directed to the shareholder value maximization. This strategy is confirmed by strong performance results. Magnit is one of the leaders of retail industry in Russia according to its operational and financial results. Company was able to stay strong during financial crisis of 2008-2009, also nowadays it shows better than average results among its competitors during current economic crisis in Russia.

Board of Directors – 3

Board size
Magnit has seven members of the Board of Directors, which seems to be quite optimal. Seven members is optimal because large BOD can lead to problems of decision-making, while small BOD can lead to decisions, which may be non-competent. According to the Corporate Library's study the average number of BOD members is 9.2.

Committees
Also Magnit has two executive committees, namely The Audit Committee of the Board of Directors and The Audit Committee of the Board of Directors both consisting of three members. Having two committees is a minimum requirement to the BOD, but best corporate practice presumes the existence of two more: The Executive Board and The Nominating Committee. Unfortunately, these committees were not created in Magnit. The good point is that the Chairman of BOD, Chachatur Pombuchan is not included into other committees. It is a good point because this avoids the conflict of interests. Another advantage is that Magnit CEO Sergei Galitskiy is not the Chairman of the BOD, again, it protects the company from the conflict of interests. However, one drawback takes place: both committees have the same members, so three members have two roles in two committees, which can lead to the conflict of interest in this area.

Degree of independence
According to Standard and Poor's research on the average the share of independent directors lies between 66% and 72%, but Magnit has three independent directors which is only 42% of total BOD.

Related transactions
Magnit discloses any related party transactions in the documents accessible at Company's official investor relations web page.

Rights and Obligations of shareholders – 2
The Company has documented dividend policy and it always pays annual dividends since 2008. Annual dividend has been constantly growing from RUR1.46/1Share in 2008 to RUR362.94/1Share in 2014. Moreover, the Company pays additional dividends minimum once a year after 1quarter/1half/9months.

In addition, "One Share – One Vote" principle is applied during the meetings of company's BOD protecting the rights of shareholders.

Takeover Defense – 1
Magnit has a high degree of hostile takeover defense because of the capital structure. It is very difficult to concentrate a big stake of Company's shares in one's hands, because Magnit CEO Sergey Galitskiy has 37.5% of the Company shares and it is nearly a controlling stake, also the Company has a huge 54% free-float. Also in Russian Federation the problem of hostile takeovers is not so widespread as it is in the Western countries and USA due to the specificity of business.

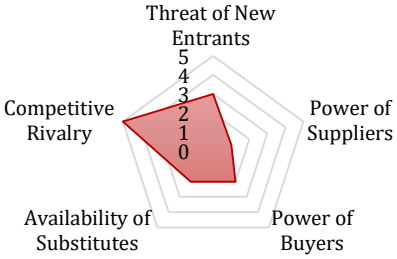
SCORE: 2 / 5
Overall score is 2 meaning that Magnit has low corporate governance risks and this grade is consistent with ISS Corporate Governance Quickscore rating for Magnit, which is presented below:

Criteria	Risk
Board Structure	Low
Shareholder Rights	Very low
Compensation	Low
Audit & Risk Oversight	Very high
Magnit rating	**Very low**

Source: ISS

Appendix M: Porter's Five Forces Analysis

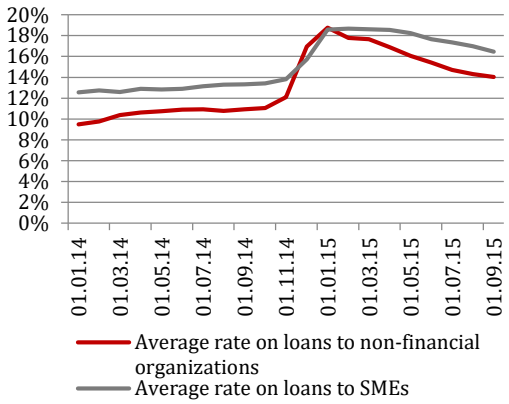
Figure 1 Porter's Five Forces Analysis



Legend:
0 – No threat to business
1 – Very Low threat to business
2 – Low threat to business
3 – Moderate threat to business
4 – High threat to business
5 – Very High threat to business

Source: Team estimates

Figure 2 Loan interest rate dynamic



Source: Central Bank of Russia

Threat of New Entrants – MODERATE. The Russian market is almost closed to new entrants. Already established in the market retail chains have a firm positioning and do not intend cede territory for new companies. Barriers to entry formerly low for retail industry have increased due to a number of factors. Despite negative dynamic, the rate on loans for SMEs is reduced slowly and has not yet reached the previous level (Picture 2). In addition, according to Bank Lending Survey, during 2014 credits conditions had been steadily deteriorating and only upward 2H 2015 have begun improve gradually. Nevertheless, current credit conditions are far from pre-crisis levels and still "hard" for free and discharge borrowing. Moreover, due to deteriorating Russian market attractiveness. the likelihood of new foreign chains entry into the Russian market can be also treated as low. The unfavorable credit conditions, sanctions applied for the Russian Federation by foreign states and Russian embargo response to these limitations also reduce the likelihood of new player entry into the market.

Power of Suppliers – VERY LOW. Historically, suppliers have little bargaining power in the retail industry. On the contrary, a retailer can easily affect the supplier. The number of suppliers is relatively large; therefore, retailers have an opportunity to choose between different supply contracts. Within the current economic situation Russian businesses can potentially suffer from contracts with foreign suppliers. Magnit can bypass the problem through direct import. Nevertheless, State Duma is considering draft legislation on the prohibition of direct import into Russia which can potentially reduce retailers' competitive advantages.

Power of Buyers – LOW. The power of buyers has weak intensity in the retail industry. Consumers cannot live without FMCG that is why they are not price sensitive. Individually, buyers have insignificant pressure on retailers. However, a large number of consumers creates a major share of the market demand. In this case, they can control quality-price criterion. In conditions of relatively high inflation Russians are forced to cut their spending. It means that they will be more careful when choosing among commodities which can potentially increase their power.

Availability of Substitutes – LOW. Since in the retail industry there is no specialization in one particular product, retailers need to focus on the differentiation. Stated differently, retailers compete in differentiation, price and shopping format. As all large retail chains operate generally in self-service shopping format, only online-service can be treat as particular substitute. All major FMCG retailers take interest in online shopping. Specifically, Metro C&C and Auchan have already launched its Web Shops, while X5 Retail Group has already shut down online shopping project because of significant revenue cut down. Since most major retail chains have not yet opened up Web Shops and Russian customers are not adapted to online-service format, the industry is not highly threatened by substitution availability.

Competitive Rivalry – VERY HIGH. Magnit faces strong competition in the retail trade. The number of retailers of different size is considerably large. All participants of retail industry fight for market share through different polices. Buyers can easily switch to another retailer, therefore, market participants seek to attract and retain consumers.

Overall Positioning and Future Perspectives. The retail industry is a highly competitive market of low buyers and suppliers power, weak substitution availability, but with moderate threat of new entrants. Stated briefly, the strongest threats of Magnit are competition within industry and, to some extent, potential new entrants. We recommend the Company to focus on attaining and maintaining sustainable competitive advantage as well as on the development of customer loyalty and commodity differentiation. The Company must continue to be aggressive to keep competitive positioning.

Appendix N: SWOT Analysis

Internal analysis	
Strengths	Weaknesses
• Scale of operation • High level of upstream integration • Absence of foreign currency debt • High level of solvency	• Low-income target audience • Low quality of human resources
External analysis	
Opportunities	Threats
• Moderate threat of new entrants • Strengthening Magnit position in the market • Drogerie store format development	• Competition in the retail market • Legislative regulation of company activities (with respect to relationships with suppliers and direct import) • Decrease in consumer purchasing power

Source: Team elaboration

Strengths:

- **Scale of operation**. Margin is a Russian food operation scale retailer leader with more than RUB700 billion revenue and 3.5 million square meters of selling space. An opportunity to achieve higher level of economies of scales and, consequently, to lower prices makes the Company more competitive in the market.
- **High level of upstream integration**. Magnit has a developed logistics, own import, private label, as well as its own production in vegetable growing. Thus, due to these benefits the Company is able to increase the margin and manage operational risk.
- **Absence of foreign currency debt**. Currently the Company has no long-term foreign currency debts; there only foreign accounts payable. Based on this fact, we can conclude that the company demonstrates the low currency risk.
- **High level of solvency**. Magnit is characterized by a favorable level of creditworthiness. Firstly, the company has a relatively high credit rating BB+, which is the highest among Russian firms. Secondly, Magnit reaches the lowest Net Debt / EBITDA ratio 0.9x among peers (Table2). Therefore, we can conclude that the Company has the low probability of default and low cost of debt compared to competitors.

Weaknesses:

- **Only low-income target audience**. In 2014 the average ticket in Magnit stores rose to 260 rubles, which is lower than those of competitors. Since low-income audience is more price sensitive, this consumer segment targeting can lead to customer outflow those results in a significant revenue reduction.
- **Low quality of human resources**. The press has many times mentioned the problems of employee professionalism in Magnit stores. Problems range from the permanent queues to the institution of criminal proceedings against workers. It definitely causes discontent among consumers, which may lead to a decrease in loyalty and hence a reduction in customer turnover.

Opportunities:

- **Moderate threat of new entrants.** Deteriorating economic conditions lower the likelihood of new retailers entrants (Appendix M).
- **Strengthening Magnit position in the market**. Many analysts are optimistic about the position of Magnit in the current economic downturn. Significant operational flows and cash reserves, as well as high Company credit solvency can contribute to maintaining and perhaps improving the financial situation of the Company.
- **Drogerie store format development**. When people reduce the number of trips to hypermarkets and hardware stores, the new prospects for the development of format "drogerie" shops emerge. Magnet has launched a chain of stores of this format called Magnet cosmetics. This store format is perspective enough (forecasting 20-30% increase in the number of outlets and turnover in the coming years). Moreover, the Company advantages in respect of vertical integration shape the customer perception of Magnit Cosmetic as a cheaper store relative to competitors, even as this is not entirely the case.

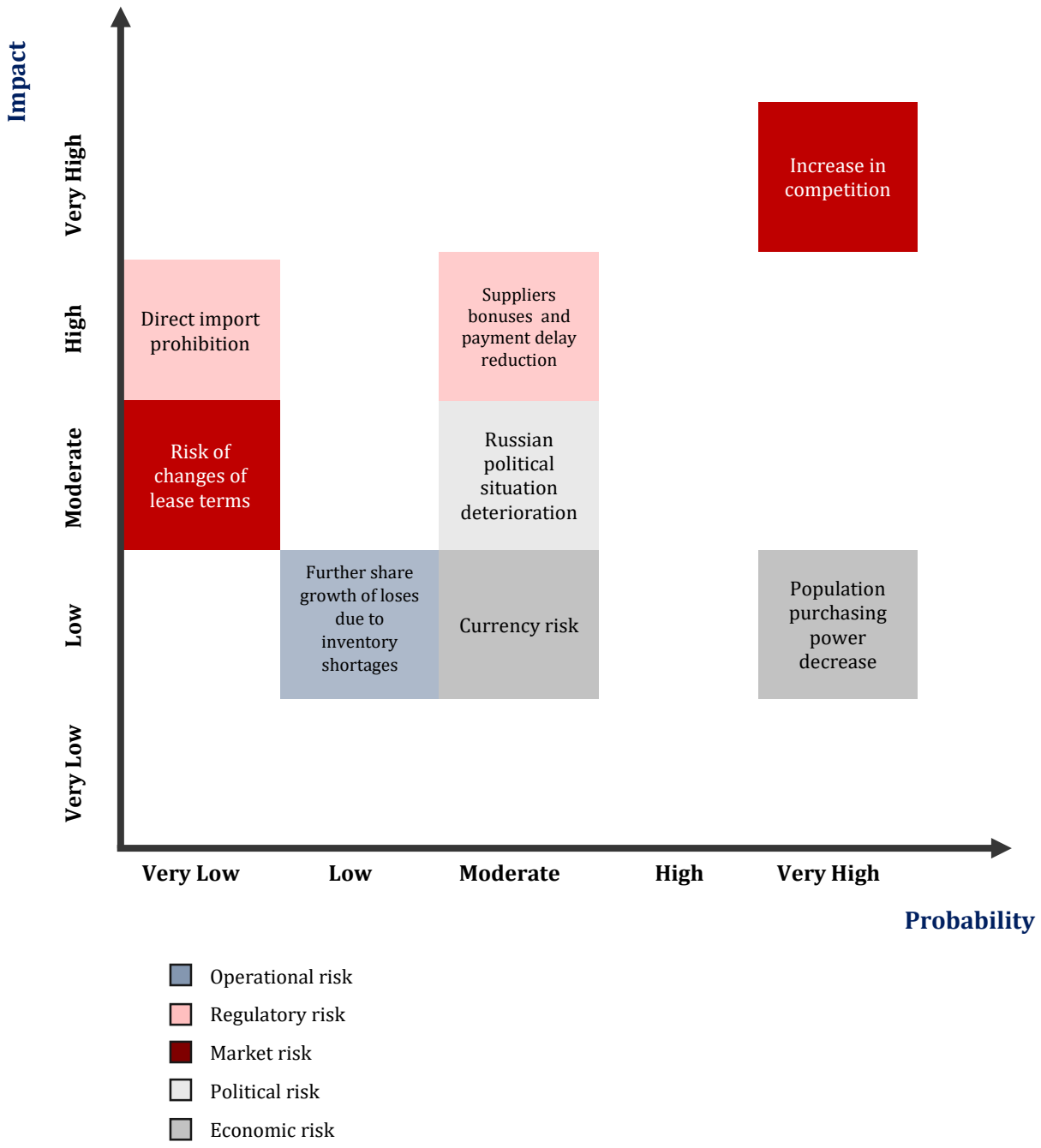
Threats:

- **Competition in the retail market**. Despite the leading Magnit positioning, its competitors are quite strong. Even during a recession, the Company experiences the threat from competitors, which also plan to scale-up and actively work on the loyalty creation.
- **Legislative regulation of company activities.** State Duma is considering draft legislations on the prohibition of direct import into Russia and radical reduction in the bonuses size, which suppliers pay to retailers, up to 3%. These two bills could serve as a threat to reduce the margin for Magnit.
- **Decrease in the customer purchasing power**. A relatively high inflation rate influences consumer purchasing power. More than 50% of buyers intent to cut their spending including expenditures on convenience goods[2]. Taking into consideration the fact that Magnit focuses on price sensitive audience, in the nearest future the Company may undergo a revenue decrease.

The Company is rated BB+ in both S&P and Rusbonds

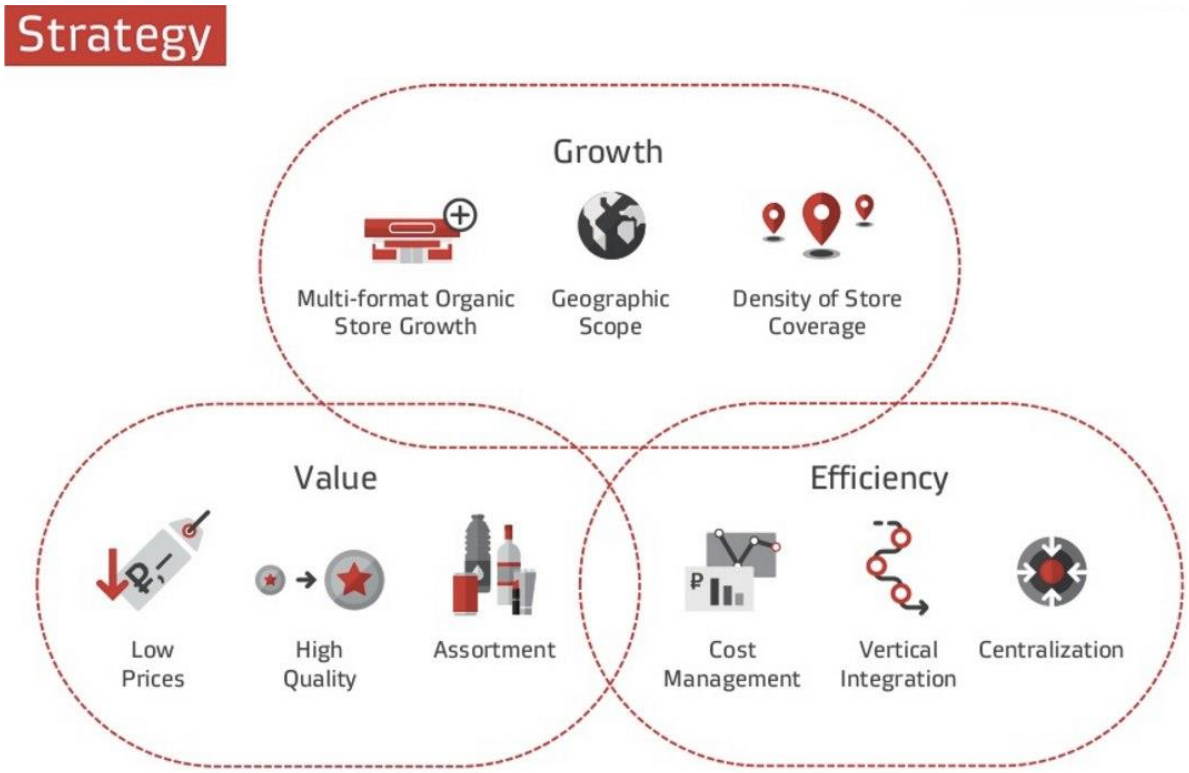
[2] RBC

Appendix O: Risk Matrix

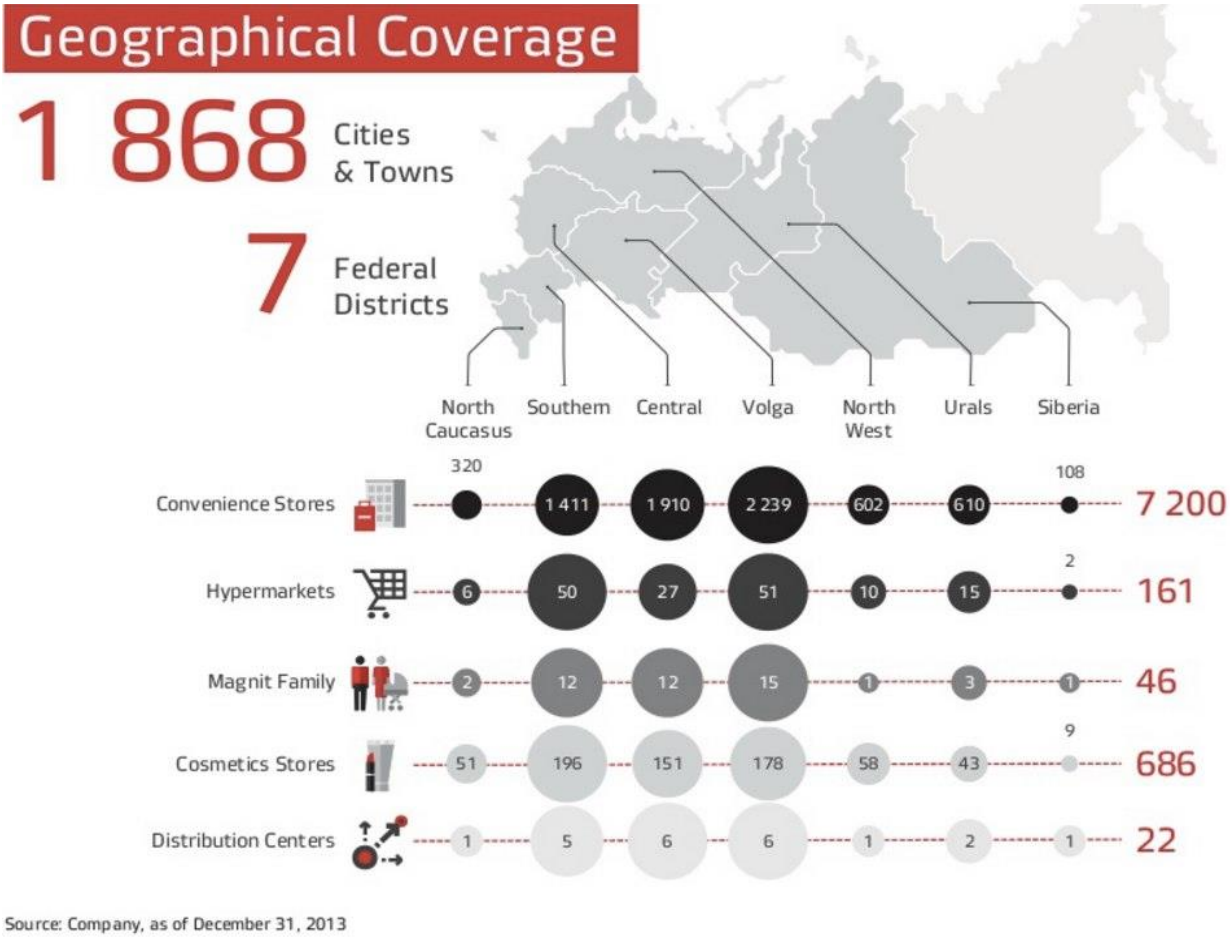


Source: Team estimates

Appendix P: Magnit's Strategy



Appendix Q: Magnit's Geographical Coverage



Appendix R: News Related to Magnit