



# Equity Valuation Report

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## Introduction

From a small workshop, which started operating in 1883, Vilniaus Baldai AB has grown into one of the largest industrial enterprises in Lithuania and the Baltic countries. It successfully combines deep traditions of furniture production and innovative business ideas. The company designs, manufactures and trades office, bedroom, sitting-room and ante-room furniture. It produces furniture made of particleboard using the state-of-the-art honeycomb technology, which is the most popular approach in Western countries. The company has installed modern equipment acquired from the world known manufacturers, such as Holzma, Homag, Burkle, Weeke, Wikoma, Biesse etc.

The company employs over 400 people. Vilniaus Baldai AB strategically invests in the expansion of production – it grows steadily, creating new working places, by working systemically to analyse the needs of

the consumer and pursuing efficient solutions to satisfy them. The company's vision represents the philosophy of modern life expressed in the words: eternal, stylish and cosy. The aforementioned facts are the most important reasons why Vilniaus Baldai AB exports almost all manufactured products to European (mostly Sweden) and other countries in the World. To be more precise, 98 per cent of production is purchased by the Swedish furniture giant IKEA.

Vilniaus Baldai AB was officially listed on the national stock exchange on June 5, 2000, being only in the secondary list. Three years later, September 1, 2003, the company has been included into the main list, where it has been present up to this moment.

## Management structure and Shareholders

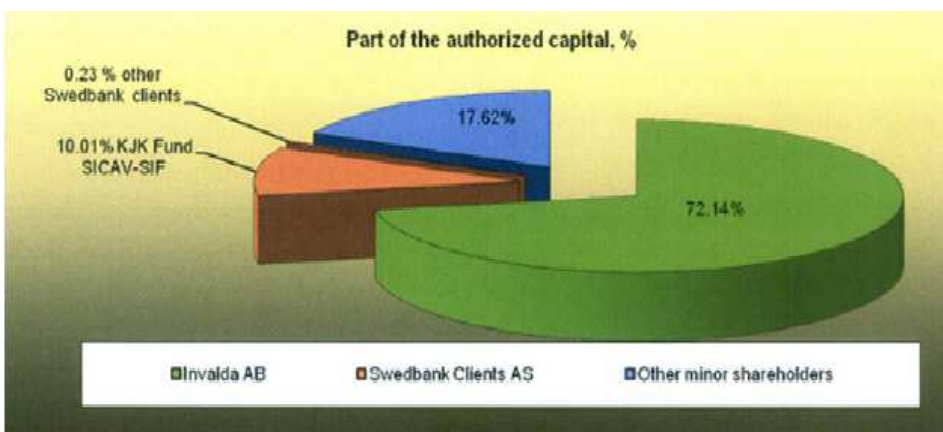
Vilnius Baldai AB holds General Meetings of shareholders, the chief executive officer (general manager) representing management and the collegial management body – the Board. The Board of the company consists of 3 members, all of whom are elected for the period of four years by the General Meeting, and it has the right to elect, withdraw or dismiss the chief executive officer.

The total number of shareholders as at 31 December 2012 amounted to 1267. In addition, only 3 of them possessed or had more than 5% of property rights or issuer's authorised capital, namely: Invalda, Swedbank Clients and KJK Fund (see Figure 1 below).

Currently, the largest shareholder Invalda AB is undergoing reorganisation. In effect, according to the publicly announced split-off terms,

a part of Invalda AB will be split – off and on the basis of this part a new public joint – stock company Invalda Privatus Kapitalas will be formed. In the split – off, 45.45 per cent of the total assets of the Company allocated to the newly established entity. The second company to be formed out of this split-off will receive 54.55% of assets and it will be owned by private individuals and therefore will not be listed on the stock exchange.

There are no shareholders having any special rights of control or any voting rights restrictions. Also, the issuer is not aware of any agreements between the shareholders, because of which the transfer of the securities and (or) voting rights could be limited.



**Figure 1** Part of the authorized capital. Extracted from Vilnius Baldai annual statements.

## Historical analysis

### Profitability

In this part of the historical analysis several different measures of profitability are overviewed and then compared with 34 companies operating in the same industry within the Baltic and Scandinavian regions. Furthermore, the development of Vilniaus Baldai profitability ratios throughout the period of the last 5 years is displayed and interpreted in depth.

Firstly, the Return on Equity (ROE) ratio is examined. The ratio was at its lowest value in 2008 due to the global financial crisis; however, it returned to its approximate previous value already the next year. Even though it can be seen that the variance of ROE is quite high, the mean ROE of Vilniaus Baldai remained well above its competitors' ROE all throughout the period. Furthermore, it began decreasing starting from 2010 due to the fact that the company retired most of its debt and, hence, decreased its leverage ratio. What is more, if only the means of the 3 year period of 2009-2011 are compared then the ROE of Vilniaus Baldai becomes almost thrice as large as that of its competitors, namely, 47.78% versus 17.25%.

Whereas if the ROE of Vilniaus Baldai is evaluated relative to the ROE of its most comparable domestic competitor - Klaipėdos Baldai, we can observe a huge difference of 47.78% versus 6.81% during the same period. This difference might naturally stem from the aforementioned different leverage ratios; however, as we will see later in the report, the otherwise financial structure of both companies is very similar and can't explain such huge differences in ROE.

In order to take into account differences in leverage ratios Return on Assets (ROA) is also looked at, as by its very nature the ROA ratio includes these differences in its calculation. It was lowest in 2008, but rose in 2009 at which level it remained throughout the period without much variation. ROA is almost three times lower than ROE as an average for the competitors of Vilniaus Baldai - 17.25% versus 5.95%, while it drops less significantly for Vilniaus Baldai - 47.78% versus 30.74%. We can see that leverage cannot explain all the differences in profitability of companies. Furthermore, the ROE of Vilniaus Baldai is the highest

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among all of the competitors in our sample.

The ROA ratio of Klaipėdos Baldai is similar to its ROE and it doesn't alter the picture significantly. Vilniaus Baldai still outperforms its closest domestic competitors by a very wide margin – 30.74% versus 4.95%

Profit margins are also compared as they might shed more light onto the differences in profitability ratios that were analysed previously. The Vilniaus Baldai profit margin is almost 4 times larger than that of its competitors' average – 14.59% versus 3.84%. However, in 2007 the profit margin was approximately the same as the one of its competitors, but it jumped significantly in 2009 which can be attributed almost entirely to a decrease in the cost of goods sold. Furthermore, the data shows that companies with higher profit margins have significantly higher profitability ratios which might help us in explaining the large discrepancies in performance. The profit margin of Klaipėdos Baldai is not only well below that of Vilniaus Baldai, but it is also below the average of the industry.

## Liquidity

Liquidity ratios are financial measurements that show how well a company is able to pay off its short-term debts (Investopedia, 2013). Overall, the historical liquidity performance of Vilniaus baldai has been improving and has now reached a satisfactory level.

For example, in 2008 its current ratio was lower than 1, which implies that during the given period the company could not have paid off its short-term liabilities. However, in two years' time, Vilniaus Baldai succeeded to reach and surpass the industry average level of 2.26 and for the last 3 years the company has continued to operate above it.

Another familiar liquidity measurement is the quick ratio. This ratio excludes inventories (which can be illiquid) and presents more accurate view of how the company is able to cover short-term debts if it is in distress. It is not a surprise that at the same time in 2008 when Vilniaus Baldai had a low current ratio, its quick ratio was even lower. Nevertheless, for the last 3 years the quick ratio value of Vilniaus Baldai has fluctuated between 1.68 and 2.35 and has

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been roughly in line with the industry average.

The cash conversion cycle (CCC) measures how fast the company is able to convert its inventory into cash through sales (Investopedia, 2013). As it can be seen in Table 1, for the last couple of years Vilniaus baldai has been operating below the industry average level in terms of the CCC value, which is a desirable trait. Payable days is a component of CCC with negative correlation with it as it shows how fast

the company pays for its purchases which are acquired on credit; hence, if the number of outstanding days payable is higher, it will lead to a lower CCC and it will be beneficial for the company. However, in comparison with the industry average, Vilniaus Baldai has a relatively low number of days payable. Aside from that, the company shows fairly good liquidity results in the last 3 years.

Liquidity Ratios				
Year	Current Ratio	Quick ratio	Payable days	CCC (days)
2008	0.96	0.73	43.14	22.64
2009	1.50	1.02	49.25	20.80
2010	2.48	1.87	44.89	21.08
2011	2.80	2.35	44.05	13.43
2012	2.43	1.68	38.83	18.00
AVG*	2.26	1.74	46.06	18.44

**Table 1** Liquidity Ratios. Made by the authors using data from the ODIN database and Annual Statement of Vilniaus Baldai

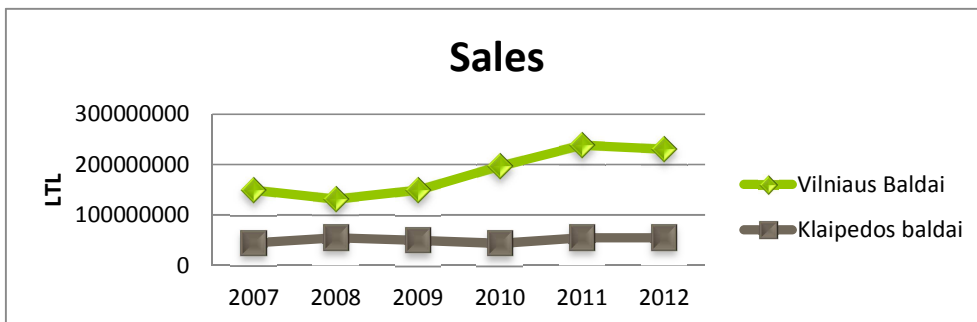
*\*Note: the industry average for the period 2009-2011 .*

**Growth**

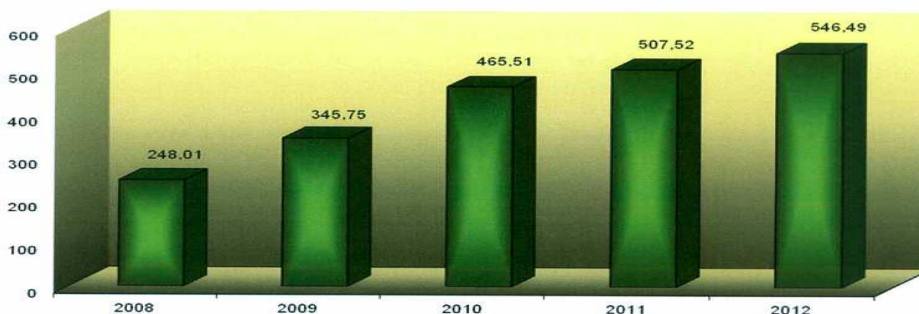
The figures show that in 2011 Vilniaus baldai revenues jumped almost by 21% and reached their peak of approximately LTL 238.4 million (Figure 2). However, as Vilniaus Baldai CEO Aidas Mackevičius expected, the company did not manage to keep this high growth rate and in 2012 sales dropped by 3.45 % (15min, 2012). Despite this fact, the company remained the largest Lithuanian furniture manufacturing company (NASDAQ OMX, 2013). Furthermore, during 2010-11 the company acquired a lot of new assets, as their growth was 39.40% and 6.76% respectively;

however, due to the company paying out huge dividends in 2011, assets decreased by 15.13% in the following year (2012).

Another significant aspect for Vilniaus Baldai was employee productivity. From 2008 till the end of 2010 the company fired more than 140 employees and the productivity of employees increased dramatically with the production per employee ratio rising from LTL 281.01 thousand per year to LTL 546.49 thousand. (see Figure 3)



**Figure 2** Growth in sales of Vilniaus Baldai and Klaipėdos Baldai. Made by the authors using data from



**Figure 3** Growth in productivity per employee in Vilniaus Baldai. Extracted from Vilniaus Baldai annual statements.

## Financial position

When it comes to a financial position of Vilniaus Baldai, it presents quite an interesting case, because the company has almost no debt. In 2007 72.02% of the company's assets were financed by debt, with 53.35% of that debt being interest bearing. However, in 2009 Vilniaus Baldai announced that it will retire most of its debt (largest shareholder – Invalda, decided to buy-out company's debt), in effect, interest bearing debt was reduced almost down to 0 in the following several years. As a result of this strategy, in 2012 interest bearing debt finances only 0.34% of all the assets while 73.1% of assets are financed by equity. The significant part of the remaining liabilities consists of trade payables, which is quite normal considering the industry Vilniaus Baldai is operating in.

Being the closest competitor, Klaipedos Baldai has a very similar financial structure. In 2012 its interest bearing debt financed 15% of its assets while its total debt financed 23.58% of its assets. The latter ratio is smaller than Vilniaus Baldai mainly due to a significantly lower amount of trade payables.

## Operating and financial risks

The company doesn't face many financial risks as its debt is almost non-existent, hence, it is reasonable to ignore this aspect entirely. However, in terms of operational risks there are still some things that need to be mentioned.

Firstly, Vilniaus Baldai relies entirely on its major customer – IKEA as, for example, in 2012 IKEA bought 98% of the company's production. Hence, Vilniaus Baldai is very dependent on the performance of IKEA, i.e. if IKEA would start facing financial difficulties and, hence, would decrease its demand towards its suppliers, Vilniaus Baldai would be affected to a very significant extent.

Secondly, the company plans to change 50% of its production portfolio and start producing products with higher added-value which requires more sophisticated technologies (Vilniaus Baldai, 2013). Such drastic changes in operations create a risk that production might not be accepted in the market due to not being qualitative enough, being priced too highly to cover the new investment or similar problems that may arise due to a shift in production.



## Scenario and forecast description

### Sales and other income

Sales are not expected to depend much on the development of the markets, because Vilniaus Baldai is a wholesaler and they sell 98% of their production to IKEA. IKEA shows great trust in Vilniaus Baldai and currently Vilniaus Baldai cooperates with IKEA in developing a strategy of new product introduction. In 2012 a reorientation in the focus of production was started and is expected to be developed further during 2013 as the company plans to halt part of its current production and launch 16 new products, including furniture for children (NASDAQ OMX, 2013). As already mentioned, the strategy was developed in coordination with IKEA, as the company buys all of the production of Vilniaus Baldai. Hence, the company will not increase its volume output in 2013, due to modernization process. Therefore, a reasonable forecast would be that sales in 2013 will decline 1-2%, but will catch up afterwards, as IKEA is demanding higher quantities from Vilniaus Baldai, which is why the whole modernization process started (OMX group, 2013). Furthermore, according to EMI after 2013 the

furniture market will grow all over the world, and as IKEA is one of the largest furniture producers and taking into account all the other facts mentioned above, sales will grow.

Interest income is expected to increase moderately mainly due to an increase in the accounts receivable and other income will continue to increase gradually with the main source being disposal of old assets during the modernisation process.

### Expenses

The price of the main material used for production by Vilniaus Baldai – lumber – has been increasing quite rapidly over the last years and is expected to reach its peak in the first forecast year (2013) after which it is assumed that its growth will drop slightly after which it will continue growing but at more modest rates. (RandomLengths, 2013)

Other production expenses are expected to grow somewhat steadily with a sharper increase in the first year of the forecast due to

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the intensity of the modernisation process. Overall, the above-average growth in other production expenses can mostly be explained by the new, more modern production processes requiring more additional resources besides materials as well.

Although wages grew by 17% in 2012, it is obvious that such rates are not sustainable and therefore we can assume a smaller, yet still quite a high rate of wage growth due to investments in modernisation that would increase productivity. (Traders, 2013)

The transportation and logistics, other operating and other expenses are expected to follow their historic trends with constantly rising oil prices constituting the bulk of the increase in transportation and logistics expense growth. Furthermore, interest expense can be said to remain zero throughout the forecast period due to the assumption of having a constant amount of debt.

### **Other inputs**

The depreciation and amortisation for different types of assets depends on the number of years of useful lives of the particular type of an asset. As it is written in the financial statements of

Vilniaus Baldai they depreciate assets at indicated rates using the straight-line method, hence, a constant depreciation rate throughout the period is assumed. By doing this the implicit assumption is also made that accounting standards will not be changed in upcoming years. The amortisation of intangible assets is equal to 8% while depreciation of land and buildings – 4%, of machinery and equipment – 12.5%, vehicle – 13% and other types of assets – 25%.

Corporate tax level is assumed to be constant and equal to 15% as there is no publicly known information about any plans to raise corporate tax level by the Lithuanian tax authorities.

Vilniaus Baldai has almost no interest bearing debt as it has repaid all of it in recent years and it has not claimed any plans to increase the level of debt. This leads to a reasonable assumption that there will be no growth in neither short-term nor long-term debt.

It is difficult to project the growth rate of other current liabilities and accrued expenses due to the hectic nature of such an item, hence, it is

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assumed that the item will grow by its historical growth rate, i.e. 3%.

Each employee is entitled to a jubilee and a pension benefit amounting to 2 or 3 months' salary payments. If salary is increasing by a certain pace, provisions should be increasing by the same pace as well, which in this case is 8%.

It is assumed that time deposits will decrease by 35% in the first year and will continue decreasing by 10% thereafter. Such an assumption is made due to the fact that the company will need cash for investing activity and trainings, especially in the first year.

Vilniaus Baldai has a large stock of finished goods which makes it reasonable to assume that the stock will decrease largely in the first year (by 15%) and followed by a constant downward trend throughout the years (by 5%).

According to publicly available information, the company has stated that it will invest more in 2013 while expansion will be less rapid afterwards. Furthermore, it was stated that most of the expansion will be due to investments in machinery and equipment.

### Scenarios

Three distinct projections of both internal and external factors influencing the performance of the company have been computed in order to provide the most versatile evaluation. The realistic (normal state) scenario which reflects the current trends in both revenue and costs development was composed and is perceived to be the most feasible. The likelihood of such happening should amount to 70%. Furthermore, two additional projections, i.e. the optimistic and the pessimistic were computed taking into account different revenue and costs development.

In the optimistic scenario revenues were assumed to increase relatively faster compared to the realistic projection in all three revenue streams. In addition, material costs, which have the largest impact on the bottom line in terms of production costs, were rather conservative. Of course, other production expenses were adjusted accordingly. Lastly, dividends were assumed to be relatively low because of the largest shareholder's intention to invest in the expansion of the company and benefit from a

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favourable market situation both now and in future.

The pessimistic scenario took into account the drastically increasing production costs and comparably lower revenues while dividends were assumed to be high because of the

largest shareholders' intention to extract most of the benefits while the company is outperforming market, regardless of it facing increasing production costs – meaning shareholders restrain from investment into expansion.

## Equity valuation and recommendation

### Inputs

Prior to interpreting the equity valuation results, a brief overview of the assumptions behind the input variables and their underlying factors is presented used in the models.

For the Discounted Cash Flow (DCF) valuation the WACC method of calculating the cost of capital was used, yielding a value of 7.93%. One of the key components of WACC calculation is the cost of equity, which is 7.94% for this company and was measured using the CAPM. For CAPM calculations the following assumptions were made:

The risk-free rate is 1.25%, which is yield on German 10-year government bonds (Bloomberg);

The base risk premium rate for a mature market is 3.41%, which is the equity risk premium rate for Germany in the period of 1976-2001 (Damodaran, Equity Risk Premiums (ERP): Determinants, Estimation and , 2012);

The country risk premium rate is 2.25%, which is the risk premium rate for Lithuania (Damodaran, Country Default Spreads and Risk Premiums, 2013);

The beta is 1.30, which is the re-levered beta for the furnishing industry in Europe (Damodaran, Betas by Sector, 2013);

For the Residual Income model several more underlying assumptions were made.

The expected growth in a steady state is 2.78%, which is the average growth rate of sales in the furnishing industry in the U.S. (Damodaran, Historical growth rates by sector, 2013). It was also considered whether or not to adjust the expected growth rate to the Lithuanian economy, yet, according to Professor Damodaran, the expected growth in a steady state should be below the growth rate of the economy (Damodaran, Equity Risk Premiums (ERP): Determinants, Estimation and , 2012). Lithuania's economy is expected to grow on average by 3.4% in the period of 2013-2017, meaning that the aforementioned 2.78% chosen growth rate in a steady state is consistent with the economic development in Lithuania, so no further adjustments are necessary (IMF).

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The expected ROE in a steady state is 17%. During the last 5 years Vilniaus Baldai recorded a ROE of almost 40% on average (see Appendix 1). However, such a high return on equity is clearly hardly sustainable; hence, in the model, throughout the forecast period ROE is expected to decrease below 25% (see Appendix 6). In effect, it is expected that in the long term Vilniaus Baldai will stabilise and yield normalised returns relative to the industry. Thus, based on this scenario, in a steady state ROE should be even lower so a figure of 17% was taken.

### Results

In order to determine the fair value per share three models were used: the DCF model, the EVA model and the relative valuation model.

According to the DCF valuation model, the fair value per share is LTL 65.75. The residual income model also showed that Vilniaus Baldai is somewhat undervalued, resulting in a price per share ratio of LTL 64.75. Both of these prices represent the corresponding upsides of 33.17% and 31.14% compared to the real price per share of LTL 49.38 on the 3<sup>rd</sup> of May 2013 (NASDAQ).

The sensitivity analysis shows that the fair value per share, in the case of the EVA model, is very much dependent on the growth rate in a steady state. For example, a 1% decrease or increase would result in corresponding changes of -9% and 13% in value. Changes in the cost of equity have a less significant effect on the price per share. In the case of DCF model, however, the share price is extremely sensitive to the discount rate and growth rate in a steady state, as even a small deflection from the status quo in any of these variables causes a double digit change in the value per share (see Appendix 5).

Since the potential threat of some inaccuracy in the assumptions cannot be excluded, a recommendation based only on the DCF and EVA valuation results cannot be made with full confidence. As a result, the fundamental strength of the company must be taken into account. The previous section yielded the result that according to the ratio analysis, the company is expected to perform well over the forecast period. Furthermore, the tight cooperation with IKEA, while having its risks as discussed more

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in the operational and financial risks section, also makes Vilniaus Baldai a very strong player in the furnishing market and ensures stable and rather predictable sales over the forecast period. To sum up, Vilniaus Baldai is a fundamentally sound company, yet it doesn't mean that the company's share price will necessarily appreciate. Thus, the relative valuation is also performed in order to confirm the previous conclusions.

For the multiples valuation, 9 comparable companies were used. The companies were chosen based on their geographic location, nature of business, size of sales and market capitalisation (Appendix 5). For the implied value calculation the Price to Earnings (P/E) multiple was chosen, because it is the most commonly used multiple for companies with normalised earnings. The P/E ratio for

Vilniaus Baldai is 7.15x, whereas the median ratio value for the sample of comparable companies is 8.86x. This would result in an implied stock price of LTL 61.28 for Vilniaus Baldai if the median P/E ratio of the chosen sample of comparable companies was used, which, in effect, represents an upside of 23.91% compared to the price as at the 3<sup>rd</sup> of May 2013.

Overall, based on the three different valuation approaches and examination of the company's fundamental soundness, it is likely that under a realistic scenario, Vilniaus Baldai is currently undervalued and its share price will go up with an upside potential between 24% and 35%. Thus, our recommendation is to *BUY* Vilniaus Baldai stock.

**Works Cited**

- 15min. (2012, April 4). *Business :15min*. Retrieved May 6, 2013, from 15min Web site: <http://www.15min.lt/en/article/business/furniture-maker-vilniaus-baldai-may-have-difficulty-maintaining-sales-growth-527-208696>
- Bloomberg. (n.d.). *German Government Bonds 10 Yr*. Retrieved May 2, 2013, from Bloomberg Market Data: <http://www.bloomberg.com/quote/GDBR10:IND>
- Damodaran, A. (2012, March). *Equity Risk Premiums (ERP): Determinants, Estimation and* . Retrieved April 26, 2013, from <http://people.stern.nyu.edu/adamodar/pdfiles/papers/ERP2012.pdf>
- Damodaran, A. (2013, January). *Betas by Sector*. Retrieved April 29, 2013, from [http://people.stern.nyu.edu/adamodar/New\\_Home\\_Page/datafile/Betas.html](http://people.stern.nyu.edu/adamodar/New_Home_Page/datafile/Betas.html)
- Damodaran, A. (2013, January). *Country Default Spreads and Risk Premiums*. Retrieved April 29, 2013, from [http://people.stern.nyu.edu/adamodar/New\\_Home\\_Page/datafile/ctryprem.html](http://people.stern.nyu.edu/adamodar/New_Home_Page/datafile/ctryprem.html)
- Damodaran, A. (2013, January). *Historical growth rates by sector*. Retrieved April 29, 2013, from [http://people.stern.nyu.edu/adamodar/New\\_Home\\_Page/datafile/histgr.html](http://people.stern.nyu.edu/adamodar/New_Home_Page/datafile/histgr.html)
- IMF. (n.d.). Retrieved April 2013, from IMF:  
[http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/weorept.aspx?pr.x=70&pr.y=18&sy=2011&ey=2018&scsm=1&ssd=1&sort=country&ds=.&br=1&c=946%2C111&s=NGDP\\_RPCH&grp=0&a=#download](http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/weorept.aspx?pr.x=70&pr.y=18&sy=2011&ey=2018&scsm=1&ssd=1&sort=country&ds=.&br=1&c=946%2C111&s=NGDP_RPCH&grp=0&a=#download)
- Investopedia. (2013). *Cash conversion cycle: Terms: Investopedia*. Retrieved May 6, 2013, from Investopedia Web site:  
<http://www.investopedia.com/terms/l/liquidityratios.asp>
- Investopedia. (2013). *Liquidity ratios: Terms: Investopedia*. Retrieved May 6, 2013, from Investopedia Web site:  
<http://www.investopedia.com/terms/l/liquidityratios.asp>
- NASDAQ OMX. (2013, April 8). *News-release: Globenewswire: NASDAQ OMX*. Retrieved May 6, 2013, from NASDAQ OMX Web site:  
<http://globenewswire.com/news-release/2013/04/08/536315/0/en/The-Board-of->



## VILNIAUS BALDAI: WORKS CITED

---

Vilniaus-Baldai-AB-convokes-the-Meeting-of-Shareholders-on-30-of-April.html

NASDAQ OMX. (2013, February 11). *Vilniaus Baldai: Global newswire: NASDAQ OMX*. Retrieved May 6, 2013, from NASDAQ OMX:  
<http://globenewswire.com/news-release/2013/02/11/522482/0/en/Vilniaus-baldai-AB-invested-over-LTL-12-million-into-new-equipment.html>

NASDAQ. (n.d.). *Vilniaus Baldai*. Retrieved May 5, 2013, from  
[http://www.nasdaqomxbaltic.com/market/?instrument=LT0000104267&list=2&date=2013-04-21&pg=details&tab=historical&lang=en&currency=0&downloadcsv=0&start\\_d=5&start\\_m=5&start\\_y=2013&end\\_d=5&end\\_m=5&end\\_y=2013&period=week](http://www.nasdaqomxbaltic.com/market/?instrument=LT0000104267&list=2&date=2013-04-21&pg=details&tab=historical&lang=en&currency=0&downloadcsv=0&start_d=5&start_m=5&start_y=2013&end_d=5&end_m=5&end_y=2013&period=week)

OMX group. (2013, February 18). *Vilniaus Baldai: News: OMX group*. Retrieved May 6, 2013, from OMX group Web site:  
<https://newsclient.omxgroup.com/cdsPublic/viewDisclosure.action?disclosureId=542278&messageId=668078>

RandomLengths. (2013). *Monthly-Composite-Prices: In-Depth: RandomLengths*. Retrieved May 6, 2013, from RandomLengths Web site:  
<http://www.randomlengths.com/In-Depth/Monthly-Composite-Prices/>

Traders. (2013). *Vilniaus Baldai: Traders*. Retrieved May 6, 2013, from Traders Web site: <http://www.traders.lt/page.php?id=15960&highlight=vilniaus+baldai>

Vilniaus Baldai. (2013, February 18). *Vilniaus Baldai: News: OMX Group*. Retrieved May 6, 2013, from OMX Group Web site:  
<https://newsclient.omxgroup.com/cdsPublic/viewDisclosure.action?disclosureId=542278&messageId=668078>

Appendix 1 Historical analysis

AB Vilniaus Baldu Kombinas  
2012.12.31

Resource structure ('000 LTL, except for employees)

Year	Employees	Sales	Assets	Liabilities	Equity
2007	821.00	151,404.00	100,209.00	72,169.00	28,040.00
2008	561.00	137,523.00	99,256.00	64,193.00	35,063.00
2009	442.00	148,966.00	77,990.00	33,077.00	44,913.00
2010	414.00	197,214.00	108,717.00	35,947.00	72,770.00
2011	445.00	238,368.00	116,061.00	32,025.00	84,036.00
2012	427.00	230,141.00	98,503.00	26,495.00	72,008.00

Growth

Employees	Sales	Assets	Liabilities	Equity
-0.32	-0.09	-0.01	-0.11	0.25
-0.21	0.08	-0.21	-0.48	0.44
-0.06	0.32	0.39	0.09	0.62
0.07	0.21	0.07	-0.11	0.15
-0.04	-0.03	-0.15	-0.17	-0.14

Change in

Year	Ch.E/Eq	'=ROE	relative to		
			- Div/Eq	+/- Net	+/-
2007					
2008	0.25	0.25	0.00	0.00	0.00
2009	0.44	0.44	0.00	0.00	0.00
2010	0.62	0.62	0.00	0.00	0.00
2011	0.15	0.37	-0.21	0.00	0.00
2012	-0.14	0.32	-0.46	0.00	0.00

Analysis

LT	+ Nonop	+ Non-	end of			
			+ Cash/CE	- Other LT	'=Eq/CE	+
91.86	0.00	10.27	0.07	-2.21	34.40	65.60
57.95	0.00	44.56	0.02	-2.54	44.39	55.61
60.75	0.00	39.54	0.10	-0.39	79.48	20.52
38.36	0.00	62.22	0.44	-1.02	92.37	7.63
34.80	0.00	64.14	2.23	-1.17	98.26	1.74
53.68	0.00	44.25	4.38	-2.31	99.54	0.46

Leverage

Year	ROE	'=(1-t)	relative to			
			*[ROCE	+(ROCE	- Rd)	Debt/Eq]
2007						
2008	0.25	0.86	0.14	0.14	0.07	1.91
2009	0.44	0.81	0.26	0.26	0.03	1.25
2010	0.62	0.85	0.59	0.59	0.07	0.26
2011	0.37	0.87	0.39	0.39	0.03	0.08
2012	0.32	0.90	0.35	0.35	0.02	0.02

Turnover

TOCE	'=SALES	/ opening	CE, end of	
			81,503.00	
1.61	131,453.00	81,503.00	78,996.00	
1.89	148,966.00	78,996.00	56,506.00	
3.49	197,214.00	56,506.00	78,779.00	
3.03	238,368.00	78,779.00	85,523.00	
2.69	230,141.00	85,523.00	72,341.00	

Du Pont

Year	ROCE	relative to	
		EBIT	* TOCE
2007			
2008	0.14	0.09	1.61
2009	0.26	0.14	1.89
2010	0.59	0.17	3.49
2011	0.39	0.13	3.03
2012	0.35	0.13	2.69

Analysis

EBIT	'= S/S	- COGS/S	-	- Admin/S	- R&D/S	- Depr/S	+/-	+/- Other	
4.15	100.00	-86.49	0.00	-4.93	0.00	-5.69	0.01	1.25	
8.78	100.00	-93.66	0.00	-5.97	0.00	-5.30	12.55	1.16	
13.73	100.00	-76.85	0.00	-5.46	0.00	-4.09	0.48	-0.35	
17.00	100.00	-75.95	0.00	-4.89	0.00	-3.25	0.86	0.22	
13.05	100.00	-79.95	0.00	-5.11	0.00	-2.75	0.59	0.27	
12.90	100.00	-78.94	0.00	-6.30	0.00	-2.34	0.20	0.28	

Capital

Year	ibDebt/A	end of	
		Equity/A	Assets/Eq
2007	53.35	27.98	3.57
2008	44.26	35.33	2.83
2009	14.86	57.59	1.74
2010	5.53	66.94	1.49
2011	1.28	72.41	1.38
2012	0.34	73.10	1.37

Working

Non-cash	Acc.rec./S	end of	
		Inv/S	Acc.pay./S
5.62	7.49	7.77	9.31
26.78	8.01	9.48	11.74
15.00	8.19	9.40	10.66
24.86	7.67	9.83	11.30
23.01	7.63	5.87	9.40
13.91	5.40	8.00	7.47

Cash

Debtor	Inventory	Payables	averages	
				Cash
30.12	35.66	43.14	22.64	
27.85	42.20	49.25	20.80	
25.29	40.68	44.89	21.08	
25.51	31.96	44.05	13.43	
24.27	32.56	38.83	18.00	

Per employee ('000

Year	Asset	Sales/Emp Assets/Em Net		
2007	1.51	184.41	122.06	2.19
2008	1.39	245.14	176.93	12.25
2009	1.91	337.03	176.45	35.27
2010	1.81	476.36	262.60	67.29
2011	2.05	535.66	260.81	60.25
2012	2.34	538.97	230.69	62.85

Margins

EBITDA/S	EBIT/S	Net	
0.10	0.04	0.01	
0.14	0.09	0.05	
0.18	0.14	0.10	
0.20	0.17	0.14	
0.16	0.13	0.11	
0.15	0.13	0.12	

PPE

Average	Remaining	Capex/Dep Net		
5.20	6.11	0.12	-0.05	
7.17	6.52	0.16	-0.04	
8.47	5.63	0.36	-0.03	
8.85	4.82	0.37	-0.02	
9.50	4.73	0.94	0.00	
11.60	7.09	2.65	0.04	

## Appendix 2 Analysis of competitors

Company	Country	Profitability			Cash Cycle Ratios		Liquidity	
		ROE (%)	ROA (%)	Profit Margin	Cash Conversion	Payable days	Current Ratio	Quick Ratio
SCANDINAVIAN BUSINESS SEAT	SE	95.27	25.31	22.29	23.71	18.19	0.95	0.85
NOVART OY	FI	23.54	9.88	6.07	34.72	20.16	1.28	0.96
SWEDWOOD HULTSFRED AB	SE	-10.72	-2.38	-2.00	0.00	12.37	1.92	0.99
PUUSTELLI GROUP OY	FI	7.31	2.42	1.56	23.92	15.47	0.82	0.50
SWEDWOOD ÄLMHULT AB	SE	-45.82	-6.68	-5.61	2.08	19.17	2.01	1.30
HILDING ANDERS DANMARK A_S	DK	10.97	8.90	16.86	52.09	46.76	3.37	2.90
BALLINGSLÖV AKTIEBOLAG	SE	29.06	15.19	11.39	42.05	31.87	2.05	1.48
AB FREDÅ	LT	34.10	14.62	7.15	23.88	48.98	0.90	0.66
SWEDWOOD TIBRO AB	SE	11.26	4.31	1.99	0.23	16.47	1.19	0.64
EXPEDIT A_S	DK	-6.95	-2.95	-2.34	n.a.	58.31	1.11	0.63
EFG EUROPEAN FURNITURE GRO	SE	-9.87	-4.80	-5.41	2.10	46.71	0.93	0.72
SPALJISTEN AKTIEBOLAG	SE	14.58	7.99	5.19	28.69	29.86	1.85	1.32
FRITZ HANSEN A_S	DK	7.86	4.64	5.05	35.50	14.62	1.44	1.19
ISKU TEOLISUUOY	FE	-94.15	-3.12	-14.94	2.43	16.59	0.96	0.51
AB KLAIPĖDOS BALDAI	LT	6.81	4.95	3.02	37.50	4.04	5.56	3.04
AB KLAIPĖDOS MEDIENA	LT	8.31	3.25	2.77	7.37	36.47	0.74	0.29
SIGDAL KJØKKEN AS	NO	122.41	21.53	11.33	33.52	31.02	0.94	0.73
KINNARPS PRODUCTION AKTIEB	SE	-0.01	-0.01	0.03	0.00	2.11	1.55	1.55
SVEDBERGS I DALSTORP AB	SE	23.97	16.01	15.07	67.15	16.36	2.57	1.70
PALLCO AKTIEBOLAG	SE	-2.17	-0.99	0.91	39.70	32.08	2.33	1.61
VEDUM KÖK OCH BAD AKTIEBOLAG	SE	10.46	7.58	5.82	29.00	20.40	2.32	1.56
STJERNFJÄDRAR AKTIEBOLAG	SE	12.45	8.08	8.22	75.33	25.64	2.93	1.85
DUBA-B8 A_S	DK	17.75	6.14	3.64	84.41	35.38	1.25	0.93
ITAB SHOP CONCEPT AS	NO	32.47	6.68	5.00	62.80	29.21	1.06	0.72
DANSANI A_S	DK	21.09	7.76	7.60	46.58	23.74	1.99	1.12
HILDING ANDERS SWEDEN AB	SE	6.69	4.01	3.10	39.97	33.40	1.69	1.21
AB EDSBYVERKEN	SE	9.73	5.24	2.17	40.88	29.59	1.43	0.91
TRESTON OY	FI	19.31	10.16	7.92	40.59	16.04	2.49	1.69
TOPI-KALUSTAJA OY	SE	-0.52	-0.11	-1.10	39.56	18.59	1.70	1.00
ITAB SHOP CONCEPT NÄSSJÖ AB	SE	209.32	16.33	6.46	17.14	25.50	0.98	0.57
NORDIC KITCHEN GROUP AB	SE	-9.60	-3.63	-2.54	38.75	29.27	1.21	0.64
UAB SWEDWOOD KAZLŲ RŪDA	LT	56.66	18.27	7.09	0.10	23.24	1.68	1.25
KUNGSÄNGEN PRODUKTION AB	SE	26.19	3.18	0.96	1.53	33.51	0.93	0.32
DESIGNA A_S	DK	-51.40	-5.52	-4.16	65.94	24.30	0.87	0.44
<b>Industry average</b>		<b>17.25</b>	<b>5.95</b>	<b>3.84</b>	<b>31.49</b>	<b>26.04</b>	<b>1.68</b>	<b>1.11</b>
Vilniaus Baldai for 2009	LT	44.46%	20.61%	13.73%	20.80	49.25	1.50	1.02
Vilniaus Baldai for 2010	LT	62.02%	42.99%	17.00%	21.08	44.89	2.48	1.87
Vilniaus Baldai for 2011	LT	36.84%	28.62%	13.05%	13.43	44.05	2.80	2.35
<b>VILNIAUS BALDAI</b>	<b>LT</b>	<b>47.78%</b>	<b>30.74%</b>	<b>14.59%</b>	<b>18.44</b>	<b>46.06</b>	<b>2.26</b>	<b>1.74</b>



# Appendix 5 Equity valuation (Realistic scenario)

Background information	
Expected ROE in steady state	24.00%
Expected Growth in steady	2.78% <a href="#">Ladu/adamodarNa</a>
Number of shares (thousands)	3 886.27

Exp. Growth in St. State	2.78%
Discount rate	9.57%
Required rate of return	9.59%

EVA (Residual Income Model)						
Year	2013(F)	2014(F)	2015(F)	2016(F)	2017(F)	Terminal Value
Period	1	2	3	4	5	
Opening equity	72 008.00	73 223.32	74 881.14	74 881.14	71 367.45	67 337.92
Residual return	22.38%	-1.12%	13.08%	11.10%	9.20%	14.41%
Residual income	16 117.48	-821.96	9 794.61	8 309.54	6 569.36	9 703.16
Horizon value						146 437.49
PV of residual income	14 707.02	-684.39	7 441.66	5 760.86	4 155.86	92 638.33
Value of equity	196 027.34					
Value of equity per share	50.44					
Value per share 2012.05.03	49.38					
Increase (decrease) percentage	2.16%					
Valuation conclusion	<b>HOLD</b>					

Discounted Cash Flow model (DCF)						
Year	2013(F)	2014(F)	2015(F)	2016(F)	2017(F)	Terminal Value
Period	1	2	3	4	5	
WACC	9.57%					
Discount factor	0.91	0.83	0.76	0.69	0.63	0.63
Present value FCF	4 520.33	12 503.52	11 829.21	12 251.07	9 898.02	149746.8596
Industry growth rate	2.78%					
PV company	200 749.01					
Fair value of the company	200 416.01					
Total shares	3 886 267.00					
Shares real value	51.57					
Value per share 2012.04.26	49.38					
Increase (decrease) percentage	4.45%					
Valuation conclusion	<b>HOLD</b>					

Valuation using multiples									
Company	Country	Current PE	PBV	PS	EV/EBITDA	EV/Sales	Payout ratio	Book	Debt to
Klaipėdos baldai	Lithuania	6.12	0.43	0.18	4.54	0.26	0	0.1594	
Skano Group	Estonia	2.21	0.76	0.33	11.56	0.65	NA	0.4319	
Juteks	Slovenia	NA	0.91	0.51	9.42	0.98	0	0.4715	
Gorenje	Slovenia	6.82	0.16	0.04	6.27	0.35	NA	0.546	
Finvest Corp	Croatia	NA	NA	0.28	NA	0.28	NA	NA	
Fabryki Mebli FORTE	Poland	8.86	0.94	0.65	8.96	0.72	56.85%	0.1417	
Decora	Poland	34.14	0.66	0.35	7.43	0.62	30.99%	0.3427	
Zakłady Lentex	Poland	9.02	0.77	1.27	14.42	1.68	0.00%	0.2287	
Walker Greenbank	U.K.	11.27	1.84	0.58	6.83	0.62	15.08%	0.1553	
<b>High</b>		34.14	1.84	1.27	14.42	1.68	56.85%	54.60%	
<b>Average</b>		11.21	0.81	0.47	8.68	0.68	17.15%	30.97%	
<b>Median</b>		8.86	0.765	0.35	8.195	0.62	7.54%	28.57%	
<b>Low</b>		2.21	0.16	0.04	4.54	0.26	0.00%	14.17%	

<b>VILNIAUS BALDAI</b>	Lithuania	7.15	2.66	0.31	2.81	0.43	0.14	0.37	
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Share price 2012.04.26	49.38
EPS	6.91
Relative value (Current PE)	61.18
Increase/decrease	23.91%
Valuation Conclusion, 2013	Undervalued (BUY)

Sensitivity Analysis - Terminal Value Approach: Growth In Perpetuity Method						
		Share price (LTL)				
		Growth rate				
		0.78%	1.78%	2.78%	3.78%	4.78%
Required rate of return	50.44					
	8.59%	45.71	48.34	51.75	56.33	62.81
	9.59%	44.67	47.19	50.44	54.82	61.01
	10.59%	43.69	46.09	49.20	53.38	59.30
	11.59%	42.75	45.05	48.02	52.02	57.68
	12.59%	41.86	44.06	46.90	50.73	56.14
	13.59%	41.02	43.12	45.84	49.50	54.68

Sensitivity Analysis - Terminal Value Approach: Growth In Perpetuity Method						
		Firm value ('000 LTL)				
		Growth rate				
		0.78%	1.78%	2.78%	3.78%	4.78%
Discount rate	200 416.01					
	8.57%	186 280	207 553	236 174	276 746	338 728
	9.57%	164 106	179 932	200 415.6	227 971	267 023
	10.57%	146 596	158 751	174 027	193 802	220 408
	11.57%	132 281	141 833	153 558	168 293	187 369
	12.57%	120 401	128 054	137 271	148 585	162 804
	13.57%	110 384	116 616	124 003	132 900	143 821

Sensitivity Analysis - Terminal Value Approach: Growth In Perpetuity Method						
		Share price (LTL)				
		Growth rate				
		0.78%	1.78%	2.78%	3.78%	4.78%
Discount rate	51.57					
	8.57%	47.93	53.41	60.77	71.21	87.16
	9.57%	42.23	46.30	51.57	58.66	68.71
	10.57%	37.72	40.85	44.78	49.87	56.71
	11.57%	34.04	36.50	39.51	43.30	48.21
	12.57%	30.98	32.95	35.32	38.23	41.89
	13.57%	28.40	30.01	31.91	34.20	37.01

## Appendix 6 Forecast performance analysis

Key Ratios		2012	2013(F)	2014(F)	2015(F)	2016(F)	2017(F)
<b>Growth</b>							
Growth in sales	Sales/Sales(0)-1	-3.45%	-1.36%	12.83%	5.86%	5.86%	5.82%
Growth in assets	Assets/Assets(0)-1	-15.13%	10.49%	6.12%	8.49%	6.46%	6.22%
Growth in equity	Equity/Equity(0)-1	-14.31%	8.44%	9.69%	9.53%	8.16%	7.15%
Growth in income	Net Income/Net Income(0)-1	-0.19%	-77.43%	211.15%	7.90%	7.25%	10.47%
Growth in debt	Liabilities/Liabilities(0)-1	-17.27%	16.08%	-2.93%	5.52%	1.41%	3.29%
<b>Profitability</b>							
Net profitability	Net profit/sales	11.70%	2.68%	7.38%	7.52%	7.62%	7.96%
Gross margin	Gross profit/sales	21.06%	10.98%	16.34%	16.19%	16.03%	16.16%
ROE (Leverage ROCE)	(1-t)*[ROCE+(ROCE-CODib)*Dib/E]	<b>31.97%</b>	<b>8.47%</b>	<b>24.24%</b>	<b>23.84%</b>	<b>23.34%</b>	<b>23.84%</b>
ROCE	EBIT/CE	34.73%	9.95%	28.43%	27.97%	27.39%	27.98%
CE	Total equity+Interest-bearing liabilities	85,523.00	72,341.00	78,417.61	85,980.45	94,140.61	101,798.09
Effective tax rate	Tax expense/EBT	9.48%	15.00%	15.00%	15.00%	15.00%	15.00%
CODib	Interest expense/Total interest bearing liabilities	1.55%	6.91%	6.91%	6.91%	6.91%	6.91%
ROE (Leverage ROA)	(1-t)*[ROA+(ROA-COD)*D/E]	<b>31.97%</b>	<b>8.47%</b>	<b>24.24%</b>	<b>23.84%</b>	<b>23.34%</b>	<b>23.84%</b>
ROA	EBIT/Total assets(0)	25.59%	7.31%	20.48%	20.82%	20.58%	21.35%
COD	Interest expense/Total liabilities	0.07%	0.09%	0.07%	0.08%	0.07%	0.07%
ROCE (DuPont)	Profit margin*TOCE	34.73%	9.95%	28.43%	27.97%	27.39%	27.98%
Profit margin	EBIT/Sales	12.91%	3.17%	8.70%	8.87%	8.98%	9.38%
TOCE	Sales/CE	2.69	3.14	3.27	3.15	3.05	2.98
<b>Financial position</b>							
Working Capital (WC)	Current Assets-Current liabilities	35,131.00	28,415.85	37,753.58	47,011.01	56,315.97	65,091.49
WC as a percent of sales	WC/Sales	15.26%	12.52%	14.74%	17.34%	19.62%	21.43%
Equity ratio	Total equity/Total assets	0.73	0.72	0.74	0.75	0.76	0.77
D/E	Total liabilities/Total equity	0.38	0.37	0.39	0.35	0.34	0.31
Dib/E	Total interest-bearing liabilities/Equity	0.02	0.00	0.00	0.00	0.00	0.00
Equity/sales	Total equity/Sales	0.31	0.34	0.33	0.35	0.35	0.36
Payout ratio	Dividend/Net profit	1.45	0.00	0.60	0.60	0.65	0.70
Debt ratio	Total liabilities/Total assets	0.27	0.28	0.26	0.25	0.24	0.23
<b>Liquidity</b>							
Quick ratio	(Current assets-Inventories)/Current liabilities	1.68	1.45	1.83	2.13	2.46	2.73
Current ratio	Current assets/Current liabilities	2.43	1.99	2.37	2.61	2.92	3.15
Cash ratio	(Cash+Marketable securities)/Current liabilities	1.00	0.77	1.11	1.41	1.72	1.98
Cash availability ratio	(Cash+Cash equiv)/Sales*365	5.03	13.24	25.74	40.26	51.53	61.25
Interest coverage ratio	EBIT/Interest expense	1,269.98	290.68	946.58	1,022.43	1,097.52	1,214.15
<b>Cash cycle ratios</b>							
Inventory turnover	COGS/Average inventory	11.21	11.86	14.04	15.67	17.49	19.46
Receivables turnover	Sales/Average receivables	15.04	16.50	16.73	17.09	17.39	17.73
Payables turnover	Purchases/Average trade payables	9.40	10.41	10.44	11.07	11.38	11.83
Debtor days	365/Receivables turnover	24.27	22.12	21.82	21.36	20.98	20.58
Inventory days	365/Inventory turnover	32.56	30.77	26.00	23.29	20.86	18.76
Payable days	365/Payables turnover	38.83	35.05	34.98	32.96	32.07	30.85
Cash conversion cycle	Inventory days+Debtor days-Payable days	18.00	17.84	12.84	11.69	9.78	8.50

## Appendix 7 Vilnius Baldai historical price chart (NASDAQ)

