Risks and Sensitivity Analysis

Black Earth Farming is exposed to a number of different risks as a land owner and crop producer. In addition, the company faces challenges specific to its geographical area and business model. Risks can be divided into three main categories: operational, market and financial.

Crop yield and price volatility are the key two risks in Black Earth Farming’s operating environment, as volume and price drive revenue volatility over a cost base that is largely, sunk and fixed. The recent years have highlighted the inherent volatility of the farming business due to the significant effects of crop volumes and prices on revenue and profitability. The Company’s business model is highly exposed to weather events, which impact crop yields and operational costs. Crop prices both internationally and domestically are highly volatile, as short-term shifts in supply and demand balances can cause prices to drop and rise significantly from one year to the next. The current lack of local price hedging mechanisms limits the Company’s ability to manage price risks. Crop export and seed import restrictions has exacerbated risks in the Company’s operating environment. A 20% fall in average crop yields combined with a 20% drop in average crop prices, both of which are within an historical range of volatility, would reduce the Company’s revenue by circa 36%. If a production shortfall is severe and regional rather than company specific, prices would, however, tend to move inversely to grain production volumes. The Company has implemented several initiatives to mitigate risks in its operating and financial environment.

Operational risks

Operational risks are related to the management of the business that, to some extent, are within the Company’s control.

Crop Yields

A range of factors affect the germination of crops in field, only some of which are within the Company’s control. The Company strives to apply agronomic best practices and the appropriate field works to maximize yield and increase the resilience of its crops to adverse weather conditions, weeds, pests and fungal disease. Weather events can delay the seeding campaign and the application of fertilizer and agrochemicals. Droughts could inhibit crop growth while heavy rainfall could disrupt the harvesting schedule, affect crop quality and increase logistics and processing costs. The Company has undertaken several initiatives to remove constraints to crop yields, improve crop production potential and mitigate weather and other risks (see also operational review). Soil pH has been raised in certain areas to remove high acidity, phosphate and potash levels have been optimized, the seed selection process has been reviewed and weed control improved. Key material inputs and life science data, such as seeds customized for the specific climatic conditions and soil characteristics for certain regions, are not always available for some of Russia’s key crops and operating areas. To mitigate such operating challenges, the company performs its own research on different seeds to identify best performing varieties internally. The Company has undertaken a comprehensive deep cultivation program to improve yield potential but also to reduce drought exposure, as well structured soils allow crop roots to exploit more soil and moisture. Black Earth Farming is committed to recruiting qualified managers and training its staff to ensure that the proper competences are in place for all field operations. Management is building an information infrastructure and reporting process to support timely and efficient decision making. Since 2013, the Company has used crop yield insurance to hedge against negative effects on crop yields from major regional weather events.

Infrastructure and Logistics

The ability to safely process (mostly drying and cleaning) and properly store its crop production after harvest is an important factor for the Company to manage risks to the quality and value of its crops. Storage and transport infrastructure in Russia is sometimes outdated and inefficient. The Company has therefore invested in internal infrastructure, capable of covering the processing and storage needs for the majority of its expected harvest year crop volumes. Implementation of GPS monitoring is expected to further increase crop and harvest information flow to support decision making and crop handling logistics. Centralized management of harvest, crop handling and storage logistics as well as real time information is key to maintain a proper level of control over some 15 harvesting teams and 30 storage sites across the Company’s operations. Drying capacity has been expanded in key production locations to reduce costs of logistics and manage risks to crop quality. As Black Earth Farming developed its export program, securing access to rail transport and port handling capacity became critical to be able to deliver on contracts with international counterparties. To improve visibility on port capacity, the Company has entered into a long-term cooperation with an international partner at a deep water port on the Baltic Sea. To manage risks of rail throughput capacity, the Company has diversified its rail transport supplier base by contracting from private suppliers alongside the leading State controlled operator.
Market risks

Market risks are mostly external to the Company and related to fluctuations in the prices of the Company’s crop output, key input materials and assets.

Crop Prices

Market prices of agricultural commodities are influenced by a variety of factors, most of which are beyond the control of the Company. These include weather, global cropping plans, government agricultural policies and changes to global demand and supply of similar substitute crops. Three record global harvests in a row have depressed current grain prices, with corn and wheat at nine and five year lows respectively. The markets available to hedge price fluctuations via physical forward sales or using financial instruments remain underdeveloped in Russia, where a majority of sales transactions are still conducted on a spot basis. The Company’s export program was partly developed to manage risks in this area. The export program serves not only to diversify sales and target an export netback margin, but also to develop international customer partnerships based on long-term contracts and to enable forward pricing. Where forward sales are not possible, the Company makes use of international hedging instruments. In 2013, the Company launched a grain hedging program with trading in futures and options on international exchanges in Paris (MATIF) and Chicago (CBOT). The Company’s hedging activities primarily serve to lock in a margin over the Company’s expected unit costs, reduce price volatility and provide an additional channel to price forward. In deciding whether or not put on price hedges, the Company considers the futures price levels in relation to budgeted costs as well as the broader sales portfolio and market outlook. A sales and marketing committee, including board representatives, convenes regularly to discuss and decide on hedging strategies. In 2015, the volatility of the Russian ruble on the one hand, and uncertainty about the potential introduction of export restrictions on the other, made execution of domestic forward and export sales more challenging.

Input Prices

Fertilizers, seeds, herbicides and fuel are key inputs in the Company’s production process and comprise a high share of its operating costs. The industries supplying these key input materials are characterized by a relatively high level of consolidation. A centralized procurement department consolidates major purchase items to obtain the best pricing and terms available. Timing is an important consideration for procurement of input materials, as the ability to fund pre-purchases and store materials restricts the ability of some agricultural producers to exploit the pricing cycle in input markets. Black Earth Farming has developed access to subsidized working capital channel and has capacity to store materials.

Employees

The Group’s senior management team consists of a number of key individuals and operating specialists. The loss of any key person could have an adverse impact on the Group’s performance. The success of the company depends on its ability to attract, retain and motivate appropriate manage-

Political and Regulatory Risk

The agricultural sector both in Russia and globally remains prone to government regulations and policies limiting free trade or affecting market prices. Ownership and lease of agricultural land is a politically sensitive and controversial issue in many parts of the world, including Russia. Equal access to subsidies remains uncertain in Russia. Geopolitical developments and the position of the Russian Federation in the international community could impact mutual commitment to free trade principles. Following a dry autumn with a weaker outlook for Russia’s 2015 wheat crop, and amidst efforts to contain domestic inflation pressure, Russia introduced a levy on wheat exports in the beginning of 2015. Russia has however emphasized the strategic importance of the agricultural sector to its economy and domestic government support for selected sub sectors of Russian agriculture is expected to remain in one form or another.

In March 2014, sanctions were imposed by the U.S. and E.U. on certain Russian officials, businessmen and companies. These actions, particularly if further extended, may result
in reduced access of the Russian businesses to international capital and export markets, capital flight, weakening of the rouble and other negative economic consequences. The impact of these developments on the future operations and financial position of the Company is difficult to determine. However, the impact of the sanctions on the company has been positive so far, as import replacement drives demand for company products. Current geopolitical tensions have resulted in increased state intervention in some situations and foreign ownership restrictions have been placed in some sectors such as Media.

Financial
The Group’s financial risks are managed in accordance with the Treasury Policy that has been adopted by the Board of Directors. Additional details regarding accounting principles and risks are given in notes 1, 27 and 29.

Financing risk
Financing risk refers to the risk of Black Earth Farming being unable to meet its need for new capital. The Company completed a SEK 530 million (USD 78mn) rights issue in December 2012 to finance investment and working capital related to the PepsiCo agreement announced in October 2012. On 30 October 2013, the Company refinanced its outstanding 2014 bond with a new four-year SEK 750 million bond, extending maturity to October 2017. As of 31 December 2015, the Company held a nominal SEK 309 million (USD 370mn) of the bonds on its balance sheet and at the time of the publication of this report, the Company held a nominal SEK 338 million (USD 40.5mn). In August 2015, the Company agreed a RUB 800mn (USD 11.0mn at the year-end closing rate) subsidized working capital credit facility with a leading Russian state bank. Although the Company generated cash from operations before interest and taxes in 2012-2015, there has historically been a dependence of external financing to support investment in business expansion. With a more mature core business profile, investment requirements have however largely declined to maintenance level. Investment into further diversification through the Company’s irrigated vegetable crop segment can be made incremental and optional. With a strong asset base and deeper cooperation with Russian banks, the Company believes that it is in a reasonable position to manage financing risks. On the back of the deterioration in Russia’s macroeconomic environment in 2014, international and domestic funding became more restrictive for businesses operating in Russia. Through 2014, as the rouble depreciated sharply, the Russian Central Bank raised key rates from 5.5% to 17.0%, including an overnight increase from 10.5% to 17%. Increases in benchmark rates were carried forward to domestic businesses in Russia, making domestic credit conditions tighter and funding generally more expensive. In 2015, the liquidity and credit environment has improved as the Central bank cut its benchmark rate to 11% to support business activity.

Liquidity risk
Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions. With key financial obligations in SEK and USD, the Company keeps most of its liquidity in USD and EUR (see also below on Currency risk).

Credit risk
Credit risk is the risk of financial loss to the Group if a customer or counterparty to a contract or a financial instrument fails to meet its contractual obligations. As the majority of domestic sales are made on a prepayment basis, the counterparty or credit risk related to receivables on domestic sales is limited. The Company seeks longer term relationships with credit worthy counterparties to reduce counterparty risks. In terms of its liquid cash holdings, the Group diversifies its credit exposure by placing surplus funds on deposit with a variety of established banks in Russia and abroad.

Interest rate risk
Changes in interest rates impact primarily loans and borrowings by changing the fair value of fixed rate debt. The Group adopts a policy of limiting its long term exposure to changes in interest rates by borrowing on a fixed rate basis, where possible. At the time of raising new loans or borrowings, management and Board apply judgment to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity. On 30 October 2013, the Company refinanced its outstanding 2014 bond with a new four-year SEK 750 million bond, extending maturity to 2017. The new bond has a fixed 9.4% coupon, which is paid quarterly. The Company’s working capital facility is in RUB at a fixed rate with a flexible maturity of less than one year.

Currency risk
The Group is exposed to currency translation risk as its borrowings, mostly denominated Swedish Krona (SEK), fluctuate against its assets, which are predominantly denominated in the Group’s functional currency in the Russian rouble (RUB). The Company is also exposed to transaction risks in its cash flows. These risks were pronounced in 2014 and 2015, when the RUB depreciated sharply against the USD and the SEK.

The Company’s policy is to make maximum use of natural hedging by seeking asset-liability and cash inflow-outflow matching. To mitigate the translation risks on the Company’s balance sheet, this means keeping cash, which is not required for immediate operational purposes, in the same currency as its liabilities (SEK) or in currencies that are highly correlated with the currency of its liabilities. It also means that the Company may gradually seek to reduce its SEK obligations and increase RUB denominated debt. As of 31 December 2015, 95% of the Company’s cash was held in hard currency. To mitigate transaction risks in the Company’s cash flows, the Company seeks, where possible, to match inflows and outflows. Key cash outflows in currency other than RUB include interest on bonds (SEK), seeds and agrochemicals (partly linked to EUR or USD) and certain capital expenditure items (partly linked to EUR or USD). Key cash inflows in currency other than RUB come from the Company’s export revenues (EUR). The Company also recognizes that domestic crop sales and certain cost items are indirectly linked to currencies other than the RUB.