Vertical Integration on the Example of Agrokor

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Abstract

This study will provide the explanation of the vertical integration, benefits and show the application of the vertical integration in the real business on the example of the Croatian company Agrokor. There are always important transactions between a multinational’s operations in different countries. The output of one subsidiary is often an input into the production of another. Or technology developed in one country may be used in others. Or management may usefully coordinate the activities of plants in several countries. Multinationals exist because it turns out to be more profitable to carry out these transactions within a firm rather than between firms. This means that multinationals engaged in internalization. If you want something done right, do it yourself. Many transactions are more profitably conducted within a firm rather than between firms. Also many activities in different countries may be usefully integrated in a single firm. One of example of vertical integrated firm in Balkan is Agrokor, Croatian company. In 1989 the joint-stock company Agrokor was registered. The Agrokor Group is the largest private company in Croatia and one of the leading regional companies. Apart from the Croatian companies, the Agrokor Group today also comprises companies from all over the region acquired during the last few years: Ledo Čitluk, Sarajevski kiseljak, Velpro Sarajevo, Frikom, Dijamant, Idea, Ledo Hungary and Fonyodi.

Keywords: Vertical Integration, Multinational Company, Production, Subsidiary, Profitability,

Outside the firm price movements’ direct production, which is coordinated through a series of exchange transactions on the market?
Within a firm, these market transactions are eliminated and in place of the complicated market structure with exchange transaction is substituted the entrepreneur-coordinator, who directs production. It is clear that these are alternative methods of coordinating production.

If you want something done right, do it yourself.
He is a slave of the greatest slave, who serves nothing but himself.

Ronald Coase (1937)

Introduction

Today the uncertain business environment cause that many companies due to changes in the market are forced to introduce some changes its business and size of the company and corporation in order to gain higher profit, gain competitive advantage and establish stable operational environment within company. Those goals are mostly achieved throughout the process of vertical integration. In order to perform efficiently all production channels must
be integrated into single line, such as connection of purchase of inputs, production, business logistics, marketing and sale within own Retail Company. Vertical integration represents the growth of Retail Company which establishes connections with its supplier (upward) and consumers (downward) integration in order to improve its competitiveness.

There are always important transactions between a multinational`s operations in different countries. The output of one subsidiary is often an input into the production of another. Or technology developed in one country may be used in others. Or management may usefully coordinate the activities of plants in several countries. Multinationals exist because it turns out to be more profitable to carry out these transactions within a firm rather than between firms. This means that multinationals engaged in internalization. (Krugman and Obstfeld, 2009)

**Vertical Integration Characteristics**

Many transactions are more profitably conducted within a firm rather than between firms. Also many activities in different countries may be usefully integrated in a single firm. Vertical integration – is when a firm participates in more than one successive stage of value chain (supply/production/distribution chain). Only if a firm can perform most of the necessary production steps less expensively than if it relied on other firms does it vertically integrated. (Carlton and Perloff, 2005)

First advantage of internalization is technology transfer. Transfer of knowledge or another form of technology may be easier within a single organization than through a market transaction between separate organizations.

Second advantage of internalization is vertical integration. If one firm (the `upstream` firm) produces a good that is used as an input for another firm (the `downstream` firm), many problems can result. They can engage in conflict regarding many things, weak cooperation, competition etc. These problems may be avoided or at least reduced if these firms are combined into a single `vertical integrated` firm.

There are at least three possible costs of vertical integration.

First, the cost of supplying its own factors of production or distributing its own product may be higher for a firm that vertically integrates than for one that depends on competitive markets, which serve these needs efficiently.

Second, as a firm gets larger, the difficulty and cost of managing it increase. The advantage of dealing with a competitive market is that someone else supervises production.

Third, the firm may face substantial legal fees to arrange to merge with another firm.

**Advantages of vertical integration**

1. Internalization
   - To lower transactions costs – avoid opportunistic behavior
   - To control quality of products supplied
   - To enhance coordination – e.g. JIT delivery
   - To reduce uncertainty regarding prices, availability, etc.

2. Steady supply of key inputs

3. Correct market failure due to externalities by internalizing those externalities

4. Avoidance of government restrictions, regulations, taxes
   - Combining regulated utilities and unregulated service companies
   - Using transfer pricing for allocation of profits

5. Gain market power
• better exploit or to create market power
6. Eliminate market power
• A victim of another firm’s market power may vertically integrate to eliminate that power. (Krugman and Obstfeld, 2009)

Agrokor Example
One of example of vertical integrated firm in Balkan is Agrokor, Croatian company. In 1989 the joint-stock company Agrokor was registered.
By using vertical integration from agriculture to manufacture of end products, Agrokor provides the customers with a wide range of fresh, healthy domestic products.
Furthermore, the proposed concentration will lead to a vertical integration of production, retail sale and wholesale, which will undoubtedly produce horizontal effects within the retail sale and wholesale.
The Agrokor Group is the largest private company in Croatia and one of the leading regional companies with consolidated total revenues greater than HRK 29bn in 2011 and employing almost 40,000 people. (Agrokor)
The Agrokor Group's core businesses are the production and distribution of food and drinks on the one hand and retail on the other, comprising among others Croatia's largest producers of mineral water - Jamnica d.d.; ice-cream - Ledo d.d.; oil, margarines and mayonnaise - Zvijezda d.d.; the largest Croatian meat industry - PIK Vrbovec d.d.; Belje, the largest agricultural and industrial capacity in Croatia and the leading retail chain - Konzum d.d.
Since it was established 30 years ago, due to a clear business vision, a consistently applied strategy and well-considered investments Agrokor has grown from a small family-owned company for the production and sale of flowers to become the leading food industry and retail group in the region today (Figure 1).

Figure 1: Agrokor Business

Source: Agrokor
Apart from the Croatian companies, the Agrokor Group today also comprises companies from all over the region acquired during the last few years: Ledo Čitluk, Sarajevski kiseljak, Velpro Sarajevo, Frikom, Dijamant, Idea, Ledo Hungary and Ponyodi (Figure 2 and Figure 3).

**Figure 2: Agrokor Group Business Structure**

<table>
<thead>
<tr>
<th>Business Group FOOD</th>
<th>Business Group RETAIL</th>
<th>Other Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrofructus d.o.o.</td>
<td>100,00%</td>
<td>Agro d.o.o.</td>
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<tr>
<td>Agrofructus d.o.o.</td>
<td>100,00%</td>
<td>Agrokor AG</td>
</tr>
<tr>
<td>Agrokor iva d.o.o.</td>
<td>100,00%</td>
<td>Agrokor energia d.o.o.</td>
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<tr>
<td>Agrokor - Zagreb d.o.o.</td>
<td>100,00%</td>
<td>Agrokor HR</td>
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<tr>
<td>Agrolegunia d.d.</td>
<td>85,32%</td>
<td>Agrokor - Trgovina d.d.</td>
</tr>
<tr>
<td>Agroopera d.o.o.</td>
<td>67,92%</td>
<td>d.o.o.</td>
</tr>
<tr>
<td>Belje d.d.</td>
<td>67,92%</td>
<td>Lozno gospodarstvo Mostar d.o.o.</td>
</tr>
<tr>
<td>Dijamant d.d.</td>
<td>73,08%</td>
<td>mlbart tekomunikacije d.o.o.</td>
</tr>
<tr>
<td>Dijamant agrar d.d.</td>
<td>45,00%</td>
<td>Union MAB d.o.o.</td>
</tr>
<tr>
<td>Dijamant agrar d.d.</td>
<td>67,38%</td>
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<tr>
<td>Frikom d.d.</td>
<td>95,83%</td>
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<tr>
<td>Ledo d.o.o.</td>
<td>78,85%</td>
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<td>Ledo d.o.o.</td>
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<td>Ledo d.o.o.</td>
<td>100,00%</td>
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<tr>
<td>Mlada d.d.</td>
<td>48,58%</td>
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<tr>
<td>Nova Sloga d.d.</td>
<td>95,88%</td>
<td></td>
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<tr>
<td>PIK Vinkovci d.d.</td>
<td>70,87%</td>
<td></td>
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<tr>
<td>PIK Vinkovci d.d.</td>
<td>99,99%</td>
<td></td>
</tr>
<tr>
<td>Ploclav d.o.o.</td>
<td>50,00%</td>
<td></td>
</tr>
<tr>
<td>Sarajevo d.o.o.</td>
<td>80,98%</td>
<td></td>
</tr>
<tr>
<td>Sojara d.d.</td>
<td>51,54%</td>
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<tr>
<td>Solanska Pla d.d.</td>
<td>96,49%</td>
<td></td>
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<tr>
<td>Vupik d.d.</td>
<td>55,76%</td>
<td></td>
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<tr>
<td>Zvijezda d.d.</td>
<td>51,84%</td>
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</tbody>
</table>

Source: Agrokor

Agrofructus d.o.o. is the leading company in the area of South East Europe, specialized in production, purchase and sale of fruits and vegetables. Annually, they supply 200,000 tons of products, grown in Croatia, Macedonia, Bosnia and Herzegovina and Serbia to countries of western and Eastern Europe. With an annual turnover of over € 100 million it represents a vital part of the Agrokor concern.

Agrokor trgovina d.d. has been operating as an independent company since 1996. The company's core business activity is trading in agricultural/food products. As part of the Agrokor Group, Agrokor trgovina participates in cooperation with other members of Agrokor, namely Belje d.d., PIK Vinkovci d.d., Vupik d.d. and Zvijezda d.d., in the production and processing of agricultural products.

Agrolaguna d.d. has been part of Agrokor since the end of 2004. It belongs to the business segment engaged in the production of domestic high-quality products. Agrolaguna's business operations are divided in several production segments: vine-growing, olive-growing, and stock-breeding and, to a lesser extent, vegetable-farming. All the company's products are regionally known for their quality and production tradition.
Agroprerada is engaged in desiccation and storing of cereals and oil crops, production of fodder, production, storing and packing of table apples. Since Agroprerada joined Agrokor its total turnover has linearly been increasing from year to year. The production of fodder is a dominating business activity of Agroprerada.

PIK Vinkovci d.d. produces and sells agricultural products of plant and animal origin and owns the biggest silo capacities in the eastern part of Croatia, which is where the main part of Croatia's agricultural production is based.

PIK Vrbovec is one of the largest Croatian meat processing industries with the 70 years old tradition in the production and processing of meat products. It has been a part of the Agrokor Corporation, its majority owner, since 2005.

Sojara Zadar as the only producer in the region with processing units able to process soybean into soybean meal, raw soybean oil and lecithin has no significant competitors in either Central or Eastern Europe. The processing capacity is 1,000 tons of soybeans a day or 300,000 tons a year.

Belje d.d., once the largest domestic agro-industrial conglomerate with the 300 years old tradition of food production, has been a part of the Agrokor Group since the beginning of 2005, which is the largest food producer in this part of Europe. Belje d.d. has been engaged in food production for over three centuries now, and it has been part of the Agrokor Concern, the largest food producer in this part of Europe, since 2005Food processing and agricultural production are the parts of Belje, divided into profit centres: production of smoked sausages and bacon, production of flour, vine production and bottling, production of dairy products, agriculture, seed growing, fodder factory, pig breeding, bullocks breeding and dairy cattle-raising.

Jamnica d.d. is the largest mineral water producer in Croatia with a tradition of more than 175 years. Since 1999, apart from mineral waters Jamnica is also producing fruit juices under the Juicy brand, and in 2002 it launched Jana natural spring water and Juicy Fruits refreshing soft drinks. Jamnica d.d. comprises the Jamnica natural mineral water bottling plant in Pisarovina, the Jana spring water and non-alcoholic beverage bottling plant in Sveta Jana, the Juicy natural fruit juices bottling plant, the Sarajevski kiseljak natural mineral water and non-alcoholic beverage bottling plant in Bosnia and Herzegovina, the Fonyódi mineral water bottling plant in Hungary, and distribution companies in Slovenia, Serbia and the USA.

In 2000 the first major step towards other regional markets was made - in Bosnia Herzegovina Jamnica became the majority shareholder of the natural mineral waters and soft drinks bottling plant Sarajevski Kiseljak, and in 2004 the Hungarian natural mineral water bottler Fonyodi was acquired.

Since 1958 when Ledo produced the first industrial ice cream Snjeguljica in Croatia, the company has been synonym for top quality frozen products such as ice cream, deserts, pastry, fruits and vegetables, fish, and ready-to-serve meals. Except in Croatia Ledo is with a 79% share the market leader in Bosnia and Hercegowina, where it purchased the ice cream factory in Čitluk and established the company Čitluk d.o.o. at the beginning of 2000. Zvijezda is the largest producer of edible oils and a sole producer of margarines, vegetable fat and mayonnaise in Croatia, being the market leader in all its product groups. The level
of recognition of Zvijezda's brands Zvijezda and Margo is 95% according to the conducted surveys.

The retail sales chain of Konzum is the leader on the Croatian market and the only one with more than 570 stores in all the counties of Croatia. Konzum d.d. is the leading retail chain in Croatia with over 700 stores in which more than 650,000 customers do their everyday shopping. Apart from its retail business, Konzum intensively develops its wholesale business as well. The company has 19 VELPRO wholesale centers. Besides being market leaders in Croatia, Konzum and Idea, Agrokor’s retail companies with total consolidated income from sales amounting to EUR 2.67 billion, make also the largest retail group in the Adria Region, according to a regional analysis of the retail sectors in Croatia, Serbia and Bosnia and Herzegovina carried out by Deloitte.

Konzum has successfully developed the K plus brand program, enjoying the greatest popularity among the Croatian customers. Konzum’s brand offer is segmented into several subcategories, namely Standard, K plus and Volim najbolje, in order to respond to the wishes and needs of the customers best.

Tisak, joint stock Company, is the largest newsstand retail chain with more than 1200 sales points. It is the leading Croatian distributor of press, tobacco products, prepaid vouchers and other merchandise that are delivered to more than 4600 sales points.

mStart d.o.o. is a member of the Agrokor Group active since July 1, 2010 when the IT business was set up as a limited-liability company aimed at optimizing IT investments and upgrading the Agrokor Group’s IT functions (Agrokor).

Figure 3: Agrokor Companies

![Figure 3: Agrokor Companies](source: Agrokor)
Some important dates for Agrokor

1995 - Opening of the first Super Konzum
   The Agrokor Group is registered

1999 - Introduction of the new brand Ledo riba (Ledo fish)

2000 - A new company was founded for the production of ice cream in Citluk, Bosnia and Herzegovina by the name of Ledo Citluk
   Agrokor owns a 97.4% share of Sarajevski kiseljak

2003 - Agrokor acquires 51% capital share of TP DC Sarajevo

2004 - The ice cream industry makes significant investments in new production and distribution capacities (Čitluk, Sarajevo, Belgrade, Zagreb, Maribor)
   First store in Bosnia and Herzegovina opened - VelPro Rajlovac

2005 - Konzum retail chain opened its first stores in Herzegovina

2007 - Agrokor Group signed a Takeover Agreement for the retail and wholesale business of VF commerce and thus, besides Croatia, became food retail leader in Bosnia & Herzegovina

Agrokor in Balkans

Agrokor also owns some firms in other Balkan's countries like:
It is in Serbia Dijamant (Oil and oil products) and Frikom (ice-cream industry). Idea d.o.o. Beograd becomes member of Agrokor Group.

Dijamant AD is the largest producer of edible oils and the leading producer of margarine, vegetable fat and delicacy products based on mayonnaise in Serbia. Beside mass consumption products, Dijamant also produces raw materials for other food industries, primarily the confectionery and bakery industries. Dijamant became part of Agrokor in mid-2005. Since then, significant improvements across all business segments have been made.

Frikom AD, the leading and largest ice-cream manufacturer in Serbia, joined the Agrokor Group in 2003. This acquisition is of key strategic importance for Agrokor, because it added exceptional new value to the total Agrokor production of ice cream and frozen food, which will enable Agrokor positioning as the leading producer of this commodity group in the region. The full impact of changes that Agrokor strongly launched acquiring Frikom in 2003 was manifested in 2004, when already in the first seven months market share grew, consequently making Frikom the leading player in the ice cream market of Serbia.

The acquisition of Idea d.o.o. conducted in 2005 is a strategically important move for Agrokor since Idea has become the foundation for further development of Agrokor's retail business in the region. Today, Idea has more than 150 retail stores across Serbia and 7 wholesale centers in Belgrade, Niš, Leskovac, Čačak, Novi Sad and Subotica with more than 4,000 employees. In 2011, the company continued making new investments, mainly aimed at expanding the retail sales network in order to make Idea stores of various formats available to customers across Serbia. The process of optimizing the existing business processes and increasing productivity and quality of service in retail sales continued in 2011 as well.

In Hungary Agrokor becomes owner of two Hungarian companies, the water filling plant Fonyodi and the ice-cream factory Baldauf (today Ledo kft. Hungary)
Except in Croatia Ledo is the market leader in Bosnia and Herzegovina, where it purchased the ice cream factory in Čitluk and established the company Čitluk d.o.o. at the beginning of 2000. In 2004 Ledo additionally strengthened its regional leadership spreading its ice cream production into Hungary especially by acquisition of the Baldauf Company, Ledo Lt. Hungary today, which is the third largest ice cream producer in Hungary. Similar to other Agrokor companies Ledo plans to spread on the regional markets but also on the markets of the European Union.

Sarajevski kiseljak d.d. is the leading company engaged in the production and sale of mineral water in Bosnia and Herzegovina with a 120-year-old tradition. New era for Sarajevski kiseljak d.d. symbolically started with 2000 when, through Jamnica, the Agrokor Group became the majority owner of the company and started making investments in its development. The company affirms its longtime leading position primarily thanks to the high and recognizable quality of its mineral water, continuous modernization and improvement of production and business processes as well as adjustment of the company's business policy to market demands and customer needs.

Conclusion

Today the uncertain business environment cause that many companies due to changes in the market are forced to introduce some changes its business and size of the company and corporation in order to gain higher profit, gain competitive advantage and establish stable operational environment within company. Those goals are mostly achieved throughout the process of vertical integration. In order to perform efficiently all production channels must be integrated into single line, such as connection of purchase of inputs, production, business logistics, marketing and sale within own Retail Company.

Vertical integration represents the growth of Retail Company which establishes connections with its supplier (upward) and consumers (downward) integration in order to improve its competiveness. The advantages of integration include:

- Higher level of product and services controlling in order to better satisfy the needs of targeted groups and market segments
- Elimination of risks in uncertain supply
- Better market differentiation
- Optimization and decrease of business costs

The Agrokor Group is the largest private company in Croatia and one of the leading regional companies. Apart from the Croatian companies, the Agrokor Group today also comprises companies from all over the region acquired during the last few years: Ledo Čitluk, Sarajevski kiseljak, Velpro Sarajevo, Frikom, Dijamant, Idea, Ledo Hungary and Fonyodi.

Agrokor offers a superior service and pleasant shopping at reasonable prices through own network of modern and functionally equipped retail facilities.

Why Agrokor does this?

- To expand market (B&H, Serbia, Montenegro, Slovenia, Hungary etc.)
- Specialized equipment or services may be needed for the industry, but are only supplied by other firms if the industry is large and concentrated.
- Labor pooling: a large and concentrated industry may attract a pool of workers, reducing employee search and hiring costs for each firm.
- Knowledge spillovers: workers from different firms may more easily share ideas that benefit each firm when a large and concentrated industry exists.
References

Agrokor http://www.agrokor.hr/en-GB/Naslovnica.html
