Car makers and upgrading: Renault in Romania
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1. Introduction

Driven by fierce competition, global car makers are opening more subsidiaries in new production locations in Eastern Europe, Asia and Latin America (Haak, 2005) to benefit from lower factor costs and to follow a shift in demand. The traditional markets of Japan, Western-Europe and North America are getting saturated, while in emerging countries there is a growing demand for cars (Becker, 2006).

However, entering a new market is not easy due to a lack of good suppliers that can fulfil the required quality standards, the absence of a skilled labour pool and different governmental and consumer requirements. Car makers attempt to overcome such problems by asking their suppliers to open subsidiaries abroad as well (“follow sourcing”) and by further investments in the new subsidiaries, domestic suppliers and educational institutes. In this way, the local workforce can be trained and local product quality can be increased. In addition, car makers do not only invest in production facilities in new locations, but also in more advanced functions such as design and engineering, although certain key functions, such as basic research, remain concentrated in the home base. Depending on specific regional assets and the knowledge strategy used, car makers may contribute to upgrading their own subsidiaries, domestic suppliers and knowledge institutes (Van Tuijl et al., 2012a). Upgrading can be simply defined as “learning and knowledge development in order to generate value added” (see section 2).

In this article, illustrated by the investments of Renault in Dacia in Romania, we examine how and why foreign car makers contribute to upgrading and we analyse the spatial implications for different parts of the value chain. We provide insights on which functions remain concentrated in the home base and which have moved to Romania.

Renault’s investments in Dacia are often discussed as a low cost strategy (see, e.g. Gebauer, 2006). However, little research exists on which functions of the value chain Renault invested in and where in Romania these facilities were built. In this paper, we treat the investments of Renault in Romania in different stages. In each stage, we analyse which functions the car maker invests in, the places, why, and what the implications of these investment decisions for upgrading. The empirical data stems from in-depth interviews with Renault managers, engineers and designers in Romania and in France and from further corporate information, including annual reports, press releases and web sites (see also Van Tuijl et al., 2012b and Van Tuijl, 2013).

2. Global value chains and upgrading

A global value chain is a tool used to give insights on the geography and (power) relations among various actors (e.g. car assemblers, suppliers, institutes, etc.) in different stages of value chains. Sturgeon et al. (2008) show that the automotive industry has a complex
geography where certain parts of the value chain are strongly localised while other parts have a global dimension. For instance, for purchasing, car makers tend to have global sourcing strategies for simple parts, while complex systems are purchased from system suppliers in direct proximity to the major assembly plants. Similarly, for more advanced functions, car makers keep engineering design concentrated in the home base and open concept design centres in new markets to meet specific consumer requirements.

A key theme discussed in global value chain research is “upgrading”. This process is especially relevant when car makers open subsidiaries in developing or emerging economies. Upgrading is a strategy to move from the so-called low road of competitiveness (e.g. price competition) to the high road of competitiveness (based on product quality or on brand value) (Giuliani et al., 2005). Humphrey and Schmitz (2002) distinguish four types of upgrading: product upgrading (making higher valued products); process upgrading (using more efficient production processes); functional upgrading (doing highervalue added functions, like design instead of assembly); and inter-functional upgrading (firms apply their skills in sectors that generate higher value added).

Upgrading can take place on various spatial and organisational levels (Gereffi, 1999; Coe et al., 2004; Van Tuijl et al., 2012a), ranging from local to global and from within a single subsidiary to networks between (lead) firms and knowledge institutes and other firms. Car makers play an important role in upgrading their own subsidiaries, domestic suppliers and knowledge institutes. Due to their global networks car makers are able to obtain knowledge from various locations and to transfer it from one place to another and contribute to upgrading. However, the degree of upgrading is often limited to product and process upgrading and is dependent on various factors, such as the knowledge strategy used, the availability of specific regional assets, and the presence of linkages between the car makers and domestic suppliers (Ernst and Kim, 2002; Liu and Dicken, 2006; Van Tuijl et al., 2012a).

In the case of Renault in Romania we apply the Humphrey and Schmitz typology and analyse to what extent the French car maker contributes to upgrading its own Romanian subsidiary, suppliers and knowledge institutes.

3. Renault and upgrading in Romania

Renault has modernised and upgraded the Romanian automotive industry in three investment stages, summarised in Table I.

**Stage 1: Takeover and upgrading of Dacia facilities**

Renault entered the Romanian market via the takeover of the former state-owned car producer Dacia in 1999. The French car maker was interested in the outdated Dacia facilities to get access to the growing market in Central and Eastern Europe, for tax benefits, and the possibility of producing vehicles in the low cost segment (e.g. the Dacia Logan) (Van Tuijl, 2013). In addition, Romania and France are culturally related, not only in languages but also in similar business values and norms. This favours an investment for French companies in Romania above other Central and Eastern Europe countries where cultural ties are weaker. Moreover, Renault was seen as a natural partner by the Romanian State since Dacia started producing cars under the license of Renault in the 1960s. Renault bought a 51 per cent equity stake in the Romanian car producer in 1999, which gradually increased to 99.3 per cent in 2004 (Renault, n.d.; Van Tuijl, 2013; Van Tuijl et al., 2012b).

“The traditional markets of Japan, Western-Europe and North America are getting saturated, while in emerging countries there is a growing demand for cars.”
In the first stage, Renault’s priority was to modernise the outdated production facilities of Dacia to produce reliable cars with good quality and low costs in an efficient production process. Renault invested in training local employees and introduced modern production technologies, contributing to product and process upgrading of its newly obtained subsidiary in the city of Pitești, the home base of Dacia (Van Tuijl, 2013).

**Stage 2: follow sourcing, supplier park development and upgrading of suppliers**

In the second stage, Renault’s priority was to develop and upgrade a local supplier base that could deliver parts and systems with the required quality and for a low price. Renault used a follow-sourcing strategy and developed a supplier park next to the Dacia plant in Pitești. It asked its French suppliers to set up production facilities in Romania and invested in a supplier park for French as well as domestic Romanian suppliers, opened in 2004. In total, 26 suppliers followed Renault to Pitești, including seven in the supplier park (Lewis, 2005). Renault encouraged its suppliers to recruit locally, especially former Dacia workers. The company trained local suppliers to reach the required quality standards and to establish long term relationships (Van Tuijl, 2013 and Renault, n.d.).

The development and upgrading of the local supplier base, which includes mainly product and process upgrading, seems to be a success, given the high local content rate of 65 per cent for the Logan model in 2009 that is expected to rise to 80 per cent (Fuss et al., 2010). The suppliers in Pitești do not only supply the Dacia plant, but also other plants in the Renault network outside Romania (including the the home base in Paris) (Van Winden et al., 2010), offering further evidence of successful upgrading of Romanian suppliers.

**Stage 3: Investment in engineering, training, design and testing**

In the third stage, Renault invested in R&D, design and training facilities, enabling its Romanian subsidiary to perform more advanced functions than production only. Renault invested in Renault Technology Romania (RTR) with engineering centres in Pitești, Bucharest (120km from Pitești) and Titu (80km from Pitești) (in 2006); a styling design centre in Bucharest (2007), a test centre in Titu, and the Automobile Academy in Bucharest (2010). These new facilities are seen as complementary to the home base and they all focus on the market in CEE. For instance, the engineering and testing centre consists of 100 benches and ten different test tracks used for vehicles and components developed or adapted for consumers in CEE and complement the Aubevoye and Lardy test centres in France (Renault, 2010). The same is true for the styling design centre, which focuses on designing car models matching the consumer requirements in CEE. This activity cannot be done long distance in France (Renault n.d.; Renault, 2010; Van Tuijl et al., 2012a, b; Van Tuijl, 2013. Renault also plays an important role in upgrading the labour pool and educational and knowledge institutes. This happens not only via on-the-job training (which has been done since the first stage), but also via the investment in the “Automobile Academy”, an

<table>
<thead>
<tr>
<th>Investment stage</th>
<th>Type of upgrading and actors</th>
<th>Reason and location of the investments</th>
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<tbody>
<tr>
<td>Take over Dacia plant</td>
<td>Product and process upgrading of the subsidiary</td>
<td>Improve product quality and production process in Pitești</td>
</tr>
<tr>
<td>Follow sourcing and development supplier park</td>
<td>Product and process upgrading of suppliers</td>
<td>Guarantee the required quality of parts and systems Reduce cost Mainly in Pitești in proximity of the Dacia plant</td>
</tr>
<tr>
<td>Investments in more advanced functions</td>
<td>Functional upgrading of the own subsidiary and upgrading of knowledge and educational institutes</td>
<td>Introduction in design, training and engineering facilities in order to develop cars for CEE Engineering in Pitești, but also in Titu and Bucharest Design in Bucharest Testing in Titu</td>
</tr>
</tbody>
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Source: Van Tuijl (2013)
educational institute set up by the French car maker to develop management, commercial and technical skills for the auto industry (Van Tuijl, 2013).

Renault supports universities all over Romania via donations of computers and other equipment. It also provides guest lectures, workshops and internships. In these educational activities, Renault presents the specific challenges a modern car maker deals with, including human resources, engineering, management and logistics. The company presents concrete business cases that are discussed in seminars, which are an important tool to find new talent. Especially in the field of engineering, Renault intensively co-operates with universities and is directly involved in master programmes of technical universities in Bucharest, Piteşti, Craiova and Iaşi. Renault does not only focus on students, but trains professors to teach students in a way that is in line with the requirements of the car maker (Van Tuijl, 2013).

Renault is especially important in the introduction and development of car design skills, a relatively new discipline in Romania. During the communist regime, the focus was on engineering while the design sector was limited to more traditional fields such as painting. By way of illustration: the car maker could not find suitable Romanian clay model suppliers because clay modelling was a completely new activity in the country. Therefore, Renault asked two French clay model suppliers to open a subsidiary in Bucharest. French design experts from Renault and their suppliers train their Romanian colleagues how to work with clay and how to make models, a striking example of process and functional upgrading. Further upgrading of knowledge institutes happens via the donation of computers, 3D technology, and clay for design schools/universities so students can work with modern materials and equipment (Van Tuijl, 2013).

Renault strategically opened its styling design centre in downtown Bucharest and not in Piteşti (next to the production plant) or in Titu (where it has a testing and engineering centre). There are four reasons for opening the design centre in Romania’s capital city. First, the vibrant downtown location of the styling centre in Bucharest offers the right creative environment where car designers can be inspired and learn about the latest consumer trends due to the large concentration of consumers and competitors. Second, the two airports in Bucharest let car designers travel quickly to Renault’s headquarters in France and to other design centres in Renault’s network. Third, the design centre is located near the engineering centre for face-to-face interactions between engineers and designers. A final reason is the presence of design and engineering schools in Bucharest that guarantees the supply of qualified workers. Students join the creative process when they are still fresh with original ideas (Van Tuijl, 2013 and Van Tuijl et al., 2012b).

4. Summary and lessons

What can we learn from this case study? Renault has contributed to all types of upgrading, but it has taken place in various stages, starting with product and process upgrading to produce reliable cars against low cost. In later stages Renault invested in functional upgrading to develop cars for the market in CEE. Similarly, Renault has started upgrading its new subsidiary (the Dacia plant) and contributed to upgrading suppliers and knowledge and educational institutes.

Second, Renault used a follow sourcing strategy, asking its suppliers from France to open subsidiaries in Romania to overcome the problem of weak local suppliers that could not supply the required quality. Indirectly, this follow sourcing strategy was applied to cut costs in the home base as some suppliers in Romania replace suppliers in France. Which suppliers were replaced depended on the complexity and transport costs of different car parts and modules.

Renault invested strategically in three different nodes based on specific regional assets: production and engineering in Piteşti; training, engineering and design in Bucharest, and testing and engineering in Titu since production, design and engineering of specific cars need to be done in the market close to the lead user (see Figure 1). Styling design happens in a vibrant urban surrounding, while engineering takes place next to production, as well as at other places, which probably can be explained by specific characteristics of different types of engineering.
Romanian activities largely complement the home base, but there is competition as well. Paris remains the “brain and control centre” of the car maker as Renault keeps basic research and strategic management functions concentrated in the home base. These activities in the value chain do not take place in Romania. The new subsidiary in Romania focuses on the development, design and production of cars for the market in CEE, whereas the home base serves the (declining) market in Western Europe, although certain suppliers in Romania have taken over production activities from the Paris cluster. It is not clear to what extent the Dacia models, developed and produced in Romania, complement or compete with certain models from the home base, especially in times of crisis when the demand for low costs cars increases.

For companies that want to enter a new market, a stepwise approach, starting with investments in production and in later stages more advanced functions, such as R&D and design, makes sense. In complex markets in other continents, it can also be the other way around, and initial investments in advanced functions followed by investments in lower valued activities might be a better strategy. However, in both cases, it is a stepwise investment strategy taking place in the medium to long run.

References


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