

## BARRIERS TO THE IMPLEMENTATION AND FUNCTIONING OF THE CIRCULAR ECONOMY IN ROMANIA

Gabriela Cornelia Piciu

Scientific Researcher II, PhD, Centre for Financial and Monetary Research  
"Victor Slăvescu"

*Abstract: The article follows the transition of SMEs to the circular economy. Their shift to the circular economy requires a change in the way of life and consumer behavior. There is a huge untapped potential for SMEs in terms of waste recovery, access to secondary or cheaper resources, starting new economic activities through new business models based on the processes of reconsolidation, repair, maintenance, recycling, as well as the ecological design of the products.*

*The article highlights that SMEs have failed to explore this potential because of regulatory, administrative, technical and cultural barriers that are systemic barriers. Also, the article shows that removing identified barriers can have significant positive economic effects in terms of retained value and employment.*

*In Romania, the economic factors for the adoption of circular practices are common factors that come from the cost side and constitute the main barriers to the adoption of circular measures.*

*Keywords: Circular business model, barriers, implementation, SMEs, facilities*

### INTRODUCTION

The transition to the circular economy requires a change in the way of life and consumer behavior. Some of them can perceive circular economy practices as most costly and hard to implement alternatives, with indirect benefits, others may not be willing to change their concepts of consumption and ownership. In general, the way consumers act is hard to predict because it is largely dependent on social norms and external conditions.

Due to their low bargaining power, SMEs trying to establish a closed-loop business model are more likely to bear extra costs because of unequal allocation of power among stakeholders in the supply chain. Policy initiatives to impose external effects or increase commodity taxes can also be resisted by powerful clusters of contradictory interests.

Saving cost of materials, creating competitive advantages, and new markets, are the main reasons why US SMEs take measures to implement the circular pattern.

Numerous barriers can hinder the implementation of circular economic practices of SMEs. These may arise, for example, from the SME environment, such as culture and policy-making, from the market chain in which SMEs operate, supplier behavior and lack of technical and financing skills.

## PRINCIPLES AND BARRIERS TO THE IMPLEMENTATION OF THE CIRCULAR BUSINESS MODEL

The priorities set by the European Commission on the transition to the circular economy consist in moving from the current status quo of linear business models to circular approaches. In order to facilitate the transition of SMEs to the circular economy, it is important to identify the main barriers.

Main barriers	Main facilities
Absence or incomplete coverage of specific legislation	Economic Opportunities
Funding new business models together with tax systems	High-level commitment with long-term business prospects
Resistance to change	Unity and staff attitudes in an organization
Perceived lack of consumer demand	The promise of increased competitiveness
Lack of a secondary market for raw materials support	Ecosystem Initiatives, Partnerships and Collaboration between Stakeholders and Competitors
Linear design of products	Standardization of requirements within the value chain
Lack of infrastructure	Spillover effects of international companies on local supply chains
Other barriers mentioned	Other potentiates mentioned
Prices and unfavorable subsidies	Compatible production approaches
Financial considerations	Awareness of stakeholders
Lack of economies of scale	Positive economic outlook Innovation and ambition
Lack of reporting and low performance indicators	Common use of vision and certification
Awareness and reduced know-how	Emergencies and consumer preferences
Competition and quality issues	Prices and costs of favorable resources
The demand for comfort	Availability of infrastructure and networks
Lack of innovation, infrastructure and networks	

*Sursa:* Implementation of circular economy business models by small and medium-sized enterprises (SMEs): Barriers and enablers, Rizos și colectivul, 2016

*Absence or incomplete coverage of specific legislation:* Circular economy is defined as an economy in which the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste is minimized. In 2015, "In the "Circular Economy Package", the EC wants "to help European businesses and consumers make the transition to a stronger and more circular economy where resources are used in a more sustainable way." One of the objectives of this package is "to remove regulatory barriers for the

circular economy". The identified regulatory barriers are multiple and cover various directives, laws and regulations.

SMEs consider the lack of government support as the main barrier to the cyclical economy, referring to the lack of a concrete, coherent and strict legislative framework, as well as to the lack of support from local authorities.

*Resistance to change:* Barriers to the implementation of the circular model due to the habits and attitudes of the manager and employees towards the implementation of commercial practices, lack of consumer interest and awareness. In many SMEs, the manager coincides with the owner of the company and therefore has significant power over the strategic decisions of the firm. In this respect, some SME managers may have a positive attitude towards the circular economy, while others may have an attitude of innovation, and may also have different perceptions of risks.

A strong risk aversion on the part of managers may prevent the adoption of the circular economy, even after evaluating the benefits associated with its implementation.

*Funding new business models together with tax systems:* The transition of SMEs to circular business practices, as a rule, involves administrative burdens arising from environmental legislation. Administrative burdens are a key issue for European SMEs; tasks often require financial and time resources that for the most part are inaccessible.

Although SMEs are generally aware of national environmental legislation, they do not have specific knowledge and capacities to meet the required requirements (Calogirou and the collective, 2010). As a result, they often rely on external consultants to fulfill their obligations; this in turn implies an additional cost that could be significant for micro-enterprises.

Most of the time, SMEs have no knowledge of the possibilities for waste to be a resource in a different value chain. They do not know other companies that may be interested in the resource sharing, and most SMEs believe employees' mentality and dedication is an important aspect to facilitate the transition to a circular economic model. It is stated that for newly established companies it is much easier to implement the circular model than for companies that are developing again from scratch by changing existing practices.

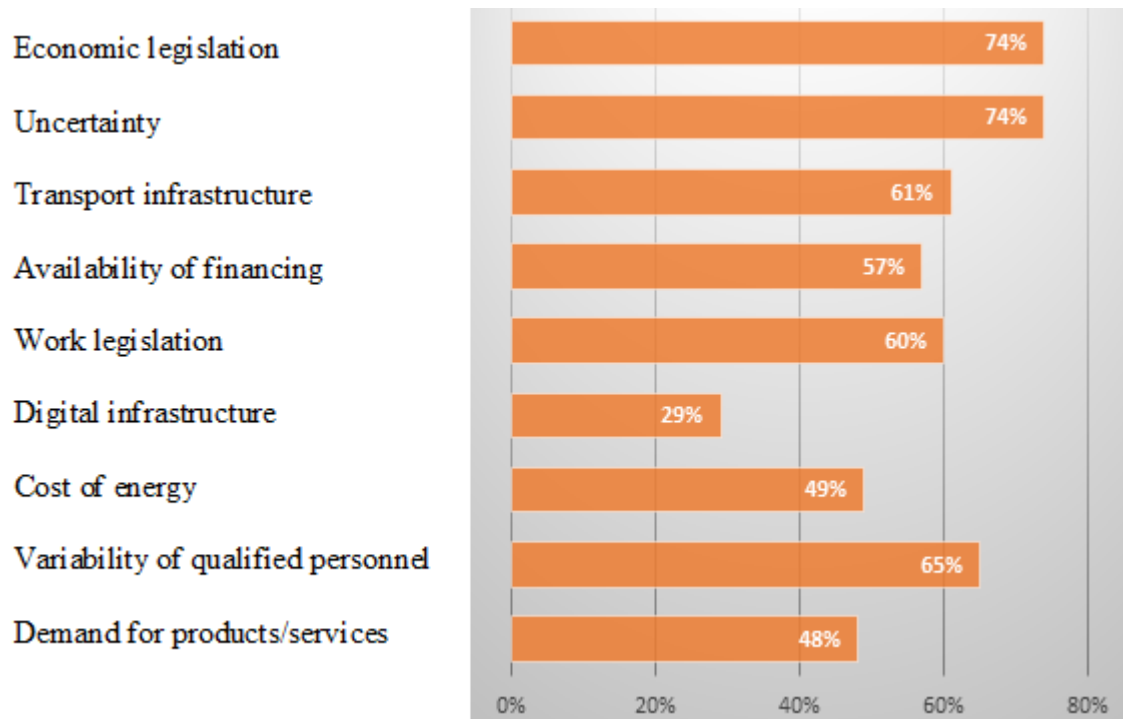
Beyond the above-mentioned categories, SMEs still face a number of additional barriers, including the absence of a reference system. The economic sector in which SMEs operate is extremely conservative and reluctant to make the "green" transition, as well as the existence of exogenous factors, such as the economic recession, which has mitigated interest in green business initiatives.

## **BARRIERS TO THE IMPLEMENTATION OF THE CIRCULAR BUSINESS MODEL IN ROMANIA**

As mentioned above, there are many barriers to the implementation of the circular economy. In Romania, the economic environment was favorable because the country has seen economic growth in recent years. Nevertheless, the uncertainty created by the political landscape and the repeated changes of the Romanian government in the tax and labor legislation have been a major factor that discouraged SMEs from investing. Approximately 60% of construction and

manufacturing SMEs perceived demand for products, qualified staff availability and energy costs as significant long-term potential barriers to investment activities (Figure 1).

**Figure 1: Long-term Barriers to Investing SMEs in Romania**



*Source:* BEI, 2017

Several SMEs in Romania intend to provide organic products and services over the next two years (19%), which is a sign that companies have begun to understand the value of these investments (Flash Eurobarometer 456, 2017).

The economic factors for the adoption of circular practices in Romania are common factors, which come from the cost side, and constitute the main barriers to the adoption of circular measures.

One in three companies in Romania perceives the costs of implementing the circular model as a burden in adopting resource efficiency, the third largest share among EU member states (Flash Eurobarometer 456, 2017). Due to the circular economic model adopted by Romanian SMEs, largely based on cost competitiveness, economic operators strongly oppose measures that would lead to increased production costs, which results in a strong opposition to stricter environmental legislation.

This is a structural problem in Romania, which would require a systemic approach to change the economic model from a cost-based approach to the one with a higher added value. On the other

hand, fewer SMEs have found lack of expertise, the right choice of resource efficiency actions for themselves, or the supply of raw materials, products or services as difficult when adopting environmental protection measures.

In general, 36% of Romanian SMEs consider complex administrative or legal procedures to be a barrier to resource efficiency. This is the biggest difficulty in Romania and exceeds the EU average of 33%, but not such a difficulty as the one encountered by SMEs in France (53%) or Poland (52%) (Eurobarometer Flash 456, 2017) 22% of SMEs also have difficulty adapting environmental legislation within them, while 27% consider that the technical requirements of the legislation are not up to date.

The 2018 survey of more than 200 Romanian SMEs found that 90% of companies are in a situation of serious risk of non-compliance due to the way they manage their obligations to the Romanian Environmental Fund regarding waste of the packaging they produce.

With the introduction of new obligations on contributions to the recovery of waste batteries that have entered into force, the burden will be even greater for SMEs. They need more training and counseling to manage their waste and legal obligations in terms of environmental management. In addition to the burdensome regulatory framework, a major problem continues to be the lack of adequate infrastructure for waste management. Only 85% of the population is covered by an adequate waste collection system, and separate collection of garbage is done only in exceptional cases. Waste collection systems at industrial level were also very inefficient, especially with regard to packaging waste.

Difficulties in the cooperation between the public and the private sector are other obstacles to the implementation of the ecological and circular economy measures in Romania. The barriers to the circular development of the Romanian enterprises include: lack of investments, lack of specialized knowledge, efficient management of available resources leading to economic growth that is not sustainable. Other barriers to the transition to a circular economy are: poor access to finance and excessive regulatory burdens.

## CONCLUSION

Removing the identified barriers can have significant positive economic effects in terms of retained value and employment. These effects remain the subject of great uncertainty, because in many cases other barriers arise. Another important factor is that in many cases, SMEs focus on relatively low circulating processes in the waste hierarchy, mainly on recycling and recovery.

Despite the various policy instruments available to facilitate the "green" transition of SMEs, there are still many barriers such as: lack of support from their supply and demand network and lack of capital.

The first barrier illustrates that SMEs typically operate as small actors in wider market chains and therefore depend on how other "green" actors in the chain are or want to be. It is also noted that SMEs do not have the financial capacity to make the transition to a circular business model.

Thus, we can say that the success of SMEs in the transition to a circular business model depends on how well this process is supported by a company culture with a "green" mentality from the staff and the manager, a local or regional network with other SMEs and multiplier support to

increase information sharing and public awareness, the benefits of having a "green" image, and being recognized as a "green" supplier by customers.

Although EU Member States support SME initiatives through funding, training and other incentives, a broader range of factors is needed to increase the attractiveness of small and medium-sized enterprises. Therefore, European and national policies should strengthen their focus on greening consumer preferences, the company's value chains and culture, and supporting the recognition of circular business models of SMEs. The implementation of support policies is based on the creation of specialized markets and practical communities.

It is noted that in recent years, companies have been more attentive to their tasks of developing a sustainable product and services through eco-friendly business practices. Generally speaking, large firms are more familiar with this circular approach than SMEs, because they gain more functionality and discipline, and a decent financial constancy compared to SMEs.

It is important to communicate new types of services and business models, as well as to convince customers about the benefits, but it can be difficult if the company operates in a global market with different customer segments or if it has minimal contact with each other.

The implementation of the circular business model also requires companies to find ways to assess risks and economic and environmental potential in circular business cases, and to familiarize themselves with the regulations that apply to circulating business models of operation.

## BIBLIOGRAPHY

- Beuren, F.H., M.G. Gomes Ferreira and P.A. Cauchick Miguel (2013), "Product-service systems: a literature review on integrated products and services", *Journal of Cleaner Production*, Vol. 47.
- Biondi, V., F. Iraldo and S. Meredith (2002), "Achieving sustainability through environmental innovation: the role of SMEs", *International Journal of Technology Management*, Vol. 24, Nos. 5/6, pp. 612–626.
- Bocken N.M.P. and S.W. Short (2016), "Towards a sufficiency-driven business model: Experiences and opportunities", *Environmental Innovation and Societal Transitions*, Vol. 18, pp. 41-61.
- Boulding, K. (1966), "The Economics of the Coming Spaceship Earth", in H. Jarrett (ed.), *Environmental Quality in a Growing Economy*, Baltimore, MD: Johns Hopkins University.
- Calogirou, C. et al. (2010), "SMEs and the environment in the European Union", PLANET SA and Danish Technological Institute, Published by European Commission, DG Enterprise and Industry.
- EEA (European Environment Agency) (2016), "Circular Economy in Europe - Developing the knowledge base", EEA Report No. 2/2016.
- EEB (European Environmental Bureau) (2014), "Advancing Resource Efficiency in Europe: Indicators and waste policy scenarios to deliver a resource efficient and sustainable Europe".

- EIB, 2017: EIB Investment Survey, Romania, [http://www.eib.org/attachments/efs/eibis\\_2017\\_romania\\_en.pdf](http://www.eib.org/attachments/efs/eibis_2017_romania_en.pdf)
- Flash Eurobarometer 456, 2017: SMEs, Resource Efficiency and Green Markets, <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/flash/surveyky/2151>
- Hillary, R. (2004), "Environmental management systems and the smaller enterprise", *Journal of Cleaner Production*, Vol. 12, pp. 561-569.
- Hoevenagel, R., G. Brummelkamp, A. Peytcheva and R. van der Horst (2007), "Promoting Environmental Technologies in SMEs: Barriers and Measures", European Commission, Institute for Prospective Technological Studies.
- Lawrence, S.R., E. Collins, K. Pavlovich and M. Arunachalam (2006), "Sustainability Practices of SMEs: the Case of NZ", *Business Strategy and the Environment*, Vol. 15, pp. 242-257.
- McKinsey Center for Business and Environment (2016), "The circular economy: Moving from theory to practice", McKinsey Center for Business and Environment Special edition.
- Parker, C.M., J. Redmond and M. Simpson (2009), "A review of interventions to encourage SMEs to make environmental improvements", *Environment and Planning C*, Vol. 27, No. 2, pp. 279-301.
- Revell, A. and R. Blackburn (2004), "SMEs and their Response to Environmental Issues in the UK", Kingston Business School, Occasional Paper Series, No. 57.
- Rizos, V., Behrens, A., van der Gaast, W. et al: Implementation of circular economy business models by small and medium-sized enterprises (SMEs): Barriers and enablers, și colectivul, 2016
- Seidel, M. et al. (2008), "A Systems Modeling Approach to Support Environmentally Sustainable Business Development in Manufacturing SMEs", *World Academy of Science, Engineering and Technology*, Vol. 2.
- Strategia Europa 2020, <https://ec.europa.eu/info>