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Critical assessment of a financial policy instrument to promote repair business model: case study of the French Repair fund.

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The extended abstract is submitted to the session: 2.2
BUSINESS MODEL EXPERIMENTATION FOR CIRCULAR
ECONOMY: CLOSE, SLOW, NARROW, REGENERATE

Extended abstract

The circular economy (CE), which aims to slow down, close and reduce resource loops (Bocken et al. 2016) is becoming a political and business imperative as non-renewable resources are limited, and pollution threatens natural ecosystems. To limit rebound effects that could undermine the benefits associated with the CE (Zink and Geyer, 2017), priority should be given to specific CE strategies, such as extending the life of products through repair (Bocken and Short, 2020; Aggeri et al. 2023). This approach can contribute to a more systemic shift (Kirchherr et a. 2017), and an even deeper societal change promoting sufficiency (Bocken and Short, 2020).

However, despite growing consumer interest, most products are not repaired (Sonogo et al. 2022). Therefore, previous research highlights the need for upscaling repair business models (BM) (Beulque et al. 2023). The main obstacles include the cost of repairs (Rogers

et al. 2021), the complexity of the procedure and the multiple weaknesses of repair services in terms of convenience and reliability (Güsser-Fachbach et al. 2023; Russell et al. 2023).

To overcome these obstacles, several factors were examined, including government intervention, as seen in the US and the EU (Dalhammar et al. 2021).

However, there is a lack of research evaluating these policy solutions in a comprehensive way (Svensson-Hoglund et al. 2021). The reason is that there are still very few instruments aimed at extending the life of products, and for those that are in place, little evidence is available.

Driven by civic actors and visionary businesses, a “Right to Repair” movement has transformed European public policy, aiming to pushing CE further and foster repair. Different innovative policy instruments have been introduced. These include financial instruments, the importance of which has been stressed (Rreuse, 2017).

Therefore, it seems urgent to study these policies, even when they are at an early stage, to adapt them, if necessary, to guide other sectors and regions in their desire to implement similar measures, and to contribute to discussions at European level on harmonized EU policies.

In this study we chose to evaluate a recent introduced economic instrument in France which is a repair fund (Law n°2020-105). The fund is financed by fees from extended producer responsibility schemes. Its aim is to finance repair through a bonus that reduces the repair cost for consumers. To benefit from this bonus, consumers must go to repairers that are labelled by a certified third party. The aim of the label is to guarantee the quality of the repair work. So, the goal of the bonus is twofold. The repair bonus is designed to encourage people to repair rather than purchase new products and, at the same time, to increase the visibility of reliable repairers through a network of labelled repairers.

We address the following research questions:

Q1. Has the establishment of the repair fund enabled progress to be made towards the objectives set?

Q1.1. To what extent has the introduction of the repair fund accelerated the uptake of repair?

Q1.2. To what extent has the introduction of the repair fund increased the visibility of repairers?

Q1.3. How to overcome limitations of the repair fund?

Q2. How does the repair fund impact the business models of repairers and contribute to their upscaling?

We used the intervention theories as an instrument to evaluate the effectiveness of the repair fund. Intervention theory is particularly relevant for recently introduced policy instrument (RIPI) when data on final outcomes are not yet available (Kautto and Similä, 2005).

Intervention theory seeks to overcome a difficulty commonly encountered in social sciences, which is the impact problem. To what extent can we infer that the result is due to the political instrument? It is even more an issue in evaluating environmental policy since they “are often very complex, they involve a high degree of uncertainty and in many cases the time frame between action and results is very long” (Mickwitz, 2003). Intervention theory is useful for improving an instrument that is not yet mature, to guide other similar schemes in other sectors or other countries.

The first stage in intervention theories is to formulate the assumptions underpinning the design of the policy instrument (here the repair fund), i.e., the assumptions that lead policy designers to believe that the measure will achieve its objectives (see Figure 1).

The second stage is to verify whether the way in which the policy instrument has been implemented allows the assumptions to be realized. Without the realization of these assumptions, the objectives are unlikely to be achieved. The advantage of this method lies in the fact that evaluation does not consist in verifying that the outcomes have achieved the objectives. The focus is on assumptions testing.

To verify the assumptions, we used a mixed method through an exploration combination model (O’Leary, 2021). It involves the sequential use of qualitative and quantitative methods. The qualitative method is used initially to contribute to the development of the quantitative method, and later in the study, new qualitative data can help to analyze, complete, and put into perspective the quantitative data.

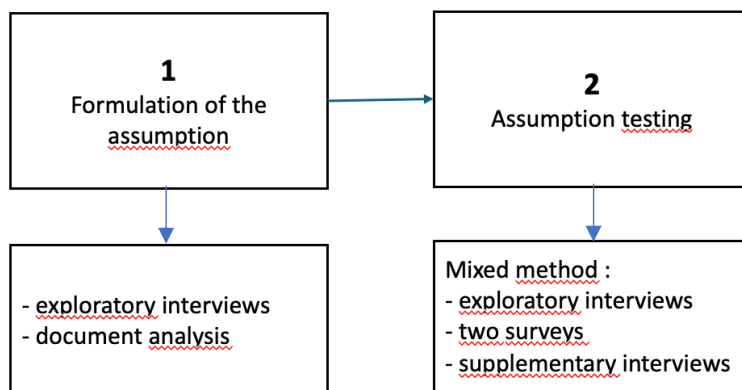


FIGURE 1: INTERVENTION THEORY METHOD

Following this sequence, we first conducted exploratory interviews with actors of the repair sector to elaborate two surveys, one targeting consumers and the other repairers. Through these surveys we collected data from over 700 respondents to understand consumers and repairers' opinion and knowledge of the repair fund, to identify the effects of the repair fund on consumers' behavior and repairers' BM and to identify potential side-effects. The analysis of the response of the surveys was completed with supplementary interviews to collect in-depth data from key actors of the repair sector and the analysis of other studies assessing the fund (Phung and Gorge, 2023; CLCV, 2024). By using multiple data sources and methods, we adopt a triangulation approach aiming to increase the confidence in the findings (Heale and Forbes, 2013).

In parallel, we used the BM framework (Al-Debei and Avison, 2010) to identify and categorize the effects of the repair fund on repairers' BM.

Results

We have recently finished our data collection process. Although our data analysis is still at an early stage, we can provide preliminary findings based on our exploratory interviews.

RQ1

The first objective of the repair fund is to encourage customers to repair by reducing the cost. An example of a behavioral change assumption for this objective would be: "consumers will be aware of the fund". Indeed, the link between the creation of the repair bonus and the fact that consumers will be encouraged to repair, assumes that the policy instrument will be perceived by consumers. This requires that a national communication scheme is conducted and effective to make the bonus known to all consumers. Without this assumption, the introduction of the instrument is unlikely to have an effect. The survey gives insights on the verification of this assumption. Is the repair bonus known to consumers? Is this assumption met?

Other assumptions that our data enables us to verify are:

- repair price reduction is a significant driver of repair activity ;
- the repair fund is sufficiently convenient for the consumer (the administrative burden is no issue for the consumer) ;
- consumers find a labelled repairer close by ;
- consumers want to repair their devices rather than replace them with new purchases ;
- repairers are interested in becoming a labelled repairer (the administrative burden is no issue for the repairer).

RQ2

The results of the impacts of the repair fund on repairers' business model will be presented in a table as Figure 2 following the BM framework (Al-Debei and Avison, 2010). The table will be completed as the data is collected and analyzed.

Value proposition	A new proposal is offered to customers: a bonus on repair operations, which means a lower bill.
	...
Value architecture	Repairers need to invest in their own qualifications and those of their staff, in order to comply with the label's standards and be able to offer the bonus to their customers.
	...
Value network	...
Value finance	Repairers have to claim reimbursement from producer responsibility organizations for the bonus they have advanced to consumers. This implies an additional administrative burden, and therefore an impact in terms of time and mobilization of human resources.
	As the bonus is advanced by the repairer to the consumer, this implies a reduced cash flow until the repairer receives his refund, which can take up to 15 days.
	...

FIGURE 2: THE REPAIR FUND IMPACTS ON REPAIRERS' BUSINESS MODELS

Conclusion

By this study our aim is to complete the literature on policy instruments promoting repair business model and on recently introduced policy instrument evaluation methods, which is of great importance for policy makers and scholars of the circular economy. Indeed, repair is a key strategy to promote sufficiency. For practitioners, the study of BM will help to understand how the fund affects activities, how repairers can upscale their businesses, and how the repair fund affects consumer behavior. For policy makers and NGOs, it provides insights concerning design and key features to be controlled for future repair fund within EU and more globally.

Keywords

Recently introduced policy instrument, intervention theory, circular economy, repair fund, business models

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