

N.º56

FEBRERO DE 2024

# DOCUMENTOS

DEPARTAMENTO DE ECONOMÍA

UNIVERSIDAD DEL NORTE



**Costs, and Effectiveness: Resources for  
the Process of Internationalization of an  
Higher Education Institution**



*Vigilada Mineducación*

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## **Serie Documentos, 56**

Febrero de 2024

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**Costs, and Effectiveness: Resources for the Process of Internationalization of an  
Higher Education Institution**

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February 5, 2024

## **Abstract**

The internationalization of higher education is implemented through several strategies and institutions use those expected to contribute the most to meet their missional objectives (Di Maria, 2019). Under this context, it would be useful to know how higher education institutions identify all the resources available from internal and external sources and their related cost (Hudzik & Stohl, 2012; Hudzik, 2015a). In this briefing paper, using literature about agglomeration economies, resource-based theory, and from the internationalization field, I show that it is not possible to classify the resources for internationalization according to cost and effectiveness. Instead, I suggest that it is possible to know how the strategies can be cost-effective. Specifically, I describe that when the institutional commitment to the internationalization process is high, there is space and time to properly identify and allocate existing resources and services to meet institutional targets related to internationalization. I recommend assessing the effectiveness as the extent to which higher education institutions (HEI) use their capacity for internationalization. A better understanding of this helps HEIs allocate appropriate resources and mitigate potential negative results.

## **Costs, and Effectiveness: Resources for the Process of Internationalization of an Higher Education Institution**

In the internationalization process, each HEI must use the strategies that promote the most meeting its missional targets (Di Maria, 2019). During this process, HEIs and other actors share learnings, knowledge, patents, funds, and other resources that foster their activities and goals (Hudzik & Stohl, 2012; Hudzik, 2015a). For this purpose, when defining a proper set of strategies to implement internationalization, it is necessary to understand the available resources' sources, costs, and effectiveness (Childress, 2009; Seeber et al., 2016). The absence of adequate data and analysis generates shortcomings in better strategies in the internationalization process (Hudzik, 2015b). Instead, it is common to find in the literature that better strategies depend mainly on the mission, context, and resources inside an HEI (Hudzik, 2015e).

This briefing paper tries to classify resources according to their source, value, and effectiveness based on literature about agglomeration economies, resource-based theory, and the internationalization field. The analysis presented is analytical, considering that HEIs belong to an economic system where they interact with other agents. Interacting, HEIs can get resources that differ from place to place. This framework allows us to improve the understanding of how HEIs may effectively select the resources used in internationalization. Having better knowledge about this will help HEIs to make an appropriate resource allocation and mitigate potential negative results, as some universities have experienced (for example, Michigan State University, George Mason University, and University of New South Wales close their branch campus and programs abroad) (Rumbley, Altbach, and Reisberg, 2012).

In the following two sections, I first present the context in which HEIs interact with other agents and actors, and later, I describe how the resources can be classified according to cost and effectiveness. In the last section, the conclusion and discussion are reported.

### **Higher education institutions: part of the economy**

Before presenting the analysis, it is essential to define some assumptions about the behavior of HEIs to delimit the scope: (a) HEIs are motivated for expanding learning, teaching, and producing knowledge (a complex motivation according to Hudzik (2015f)<sup>1</sup>; (b) there is a degree of interest for internationalization; (c) the stakeholder's perspective is from an institutional level (Hudzik, 2015b); (d) the resources under analysis are for internationalization purposes only.

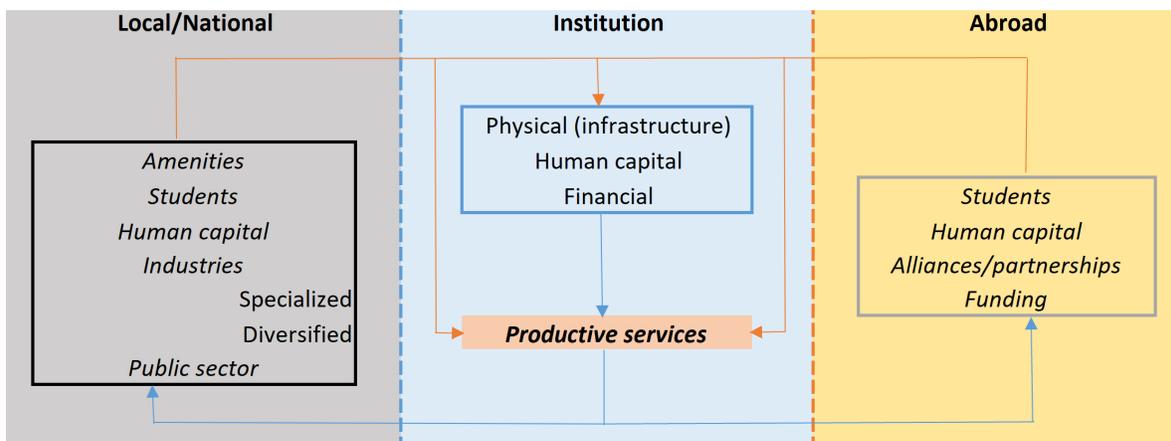
*Diagram 1* shows how a specific HEI interacts with its environment and available resources. The diagram contains three main areas: the external local/national market, the HEI (internal institution), and the external international market (abroad). Within each of them, there are resources available. At the local/national level, there are students (demand), human capital (faculty, managers, and staff), real sectors (demand for services and alliances and partnerships, including other HEIs), and amenities (natural or artistic). At the abroad level, there are similar resources. Finally, within the HEI, there are physical, human, and financial resources under complete control of the HEI.

Given that each HEI faces a different context, it must consider what can define the environment. The concentration of the population, as a result of the specialization of work

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<sup>1</sup> This assumption is feasible according to Hudzik (2015a: 13) "...it is too strong a statement to say that knowledge creation, truth, and reason don't remain front and center as core motivations."

generated by complementary activities and productive diversification, produces benefits named agglomeration economies that foment more concentration (Duranton & Puga, 2004; Marshall, 1890; Parr, 2002). To the extent that an increase in the concentration of productive activity results in an increase in cheaper inputs, access to more business services, trade, transport and communication, thick labor markets, and knowledge transfer, it also leads to lower production costs. However, agglomeration diseconomies associated with congestion and increased competition arise from a certain concentration level. Generally, the greater the agglomeration, the lower the inputs, productive resources, and knowledge access cost. So, the size of the population defines the local context that faces each HEI. However, the fact that resources and options are available does not guarantee that an HEI can use them.



**Diagram 1.** Interdependence.

Resource-based theory helps us identify how HEIs can take advantage of the resources they have and those available in the environment. This approach was influenced by the seminal works made by Penrose (1959) (Kor and Mahoney, 2004; Rugman and Verbeke, 2002). According to the resource-based theory, the resources in a HEI provide productive services that are determined by administrative decisions (management) and the

accumulated learning the HEI acquires via its human capital. Specifically, productive services are the different uses or functions of productive resources (physical, human, and financial). This means that HEI's management capacity depends on the quality of productive services that can be obtained from their productive resources, as shown in **Diagram 1**.

Identifying and acquiring resources and productive services from external sources (local or international) depends on the HEI's knowledge and other productive services. For example, the absorption capacity of a company is linked to its prior experience since a base level of knowledge is required to actually use it (Cohen & Levinthal, 1990; Todorova & Durisin, 2007). That means that HEIs with better productive services can identify more productive services within an environment. In other words, each HEI has a limit to its growth potential due to its productive services, even if the services originate from the same resource (a classroom, for example), because each HEI has its own knowledge and ability to use it.

In conclusion, the resources available within an HEI define the productive services (blue arrow in **Diagram 1**), which interact with external actors (both local and international), attracting more resources and productive services to the HEI (orange arrow in **Diagram 1**). Over time, the amount of resources and productive services in an HEI may grow or decrease depending on the managerial decisions implemented (strategies). Additionally, the HEIs face barriers when they try to get resources and productive services from external sources (Hudzik, 2015c). One obstacle may be the laws regulating the interaction between agents (through contracts, grants, and alliances). This barrier may be more challenging for international sources because HEIs need to allocate more resources to

get the knowledge required to establish collaborations, partnerships, and other interactions. This barrier is represented by the dashed lines in *Diagram 1*.

### **Resources: Sources, Costs, and Effectiveness**

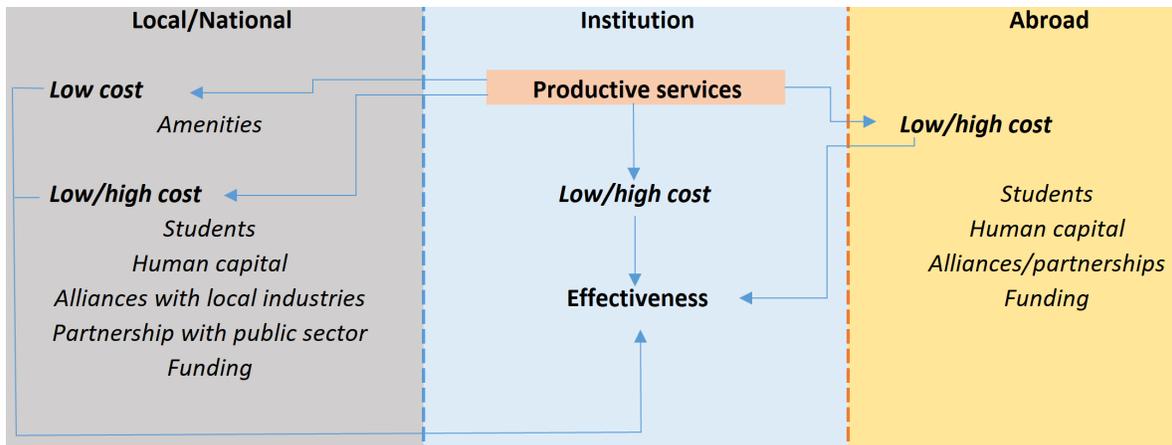
According to the discussion presented in the previous section, it is not possible to classify the resources as low or high cost<sup>2</sup> because it will depend on the existing capacities of the HEIs. Several authors have proposed classifications for resources. Lutabingwa (2019) presents a set of traditional, sustainable, and innovative revenue streams that can be used to support the internationalization process, and Hudzik (2015a) suggests a more complete classification of the resources, considering more than financial. They all recognize that institutions need a minimum capacity to access resources. However, this is still incomplete because it does not include what the resources (financial, physical, and human) can do (the productive services defined in the previous section).

#### **Sources and Cost**

*Diagram 2* represents how productive services available in an HEI define whether the external resources used in the internationalization process are low or high cost. When the HEI has the level of productive services to access external resources and productive services without any additional effort, those are low-cost. However, when the HEI needs to make an additional effort (like allocation of more resources--physical, human, or financial), the cost to acquire the resources or the productive services will increase (high). The reader notes that the required resources will define the cost (see blue arrow in *Diagram 2*).

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<sup>2</sup> Or even a degree between them.



**Diagram 2.** Productive services define the cost and effectiveness of strategies.

I suggest that amenities, like weather, cultural life, and natural resources, are low-cost resources, not free because HEI will need to allocate resources to exploit them. For example, HEIs pay someone to make a list of tourist attractions.

HEIs may interact with other actors through partnerships that provide resources, strengthen previous capacities, and foster new collaborations (Zagalo-Melo, 2019). They also integrate with the environment and its industry to reinforce the mission of universities (Hudzik, 2015f) while producing resources and services. Contact and interaction with local industry is a driver of innovation. This can be easier with close sectors because it is cheaper. Maintaining alliances and partnerships requires face-to-face interactions: Jones (2019) suggests funding for travel purposes for SIO.

Having a common language may represent a low cost when defining international collaborations. One example of this is the recent alliance between three top regional universities in Latin America, “La Tríada” integrated by The Tecnológico de Monterrey, The Universidad Católica de Chile, and The Universidad de los Andes (Uniandes, 2018). Another example of low-cost interaction is creating alliances with institutions with a

common interest (Hudzik, 2015a) and a good fit in inter-institutional mission, values, and stature (Hudzik and Simon 2012).

One key strategy to reduce costs in the internationalization process is to identify those activities that produce dual benefits strategies to leverage the expenditures and relations between actors across the institution (Hudzik, 2015c) or from outside. These strategies are more likely to occur when the Senior International Officer (SIO) knows better the resources and productive services within the institution. The institutional barriers mentioned by Hudzik (2015d) may be eroded by understanding the potential usage of the resources and engaging the relations between key actors (Hudzik, 2015a) within the institution.

In general, the resources and its productive services available within HEIs will push to be used, even without the support of the SIO or other senior leaders. For example, a faculty member, for his/her own, may start collaborating with colleagues worldwide. Indeed, in case the mentioned faculty faces any barrier, he or she may decide to leave the HEI. That extreme situation may happen in the case that SIO or senior leaders do not know enough about the potential they have.

### **Effectiveness**

Assessing the effectiveness of an internationalization strategy is a challenging and required process because stakeholders are interested in knowing the results (Helms et al., 2015). SIOs face several challenges, such as the fact that outcomes in education are difficult to measure (Brimbley, Verstegen & Knoeppel, 2020).

In general, we could use two approaches to assess the effectiveness of internationalization strategies. The first is using the traditional frame (described by Hudzik, (2015b) and Green, 2012), checking the degree to which strategy targets have been met or the results produced. The second, derived from the discussion in this document, is to assess the effectiveness as the extent to which resources and productive services available within an HEI for internationalization purposes are used. The reader should note that the latter is more complex and complete because it considers the opportunity cost inherent in the resources and services the HEI has. The former is focused only on those resources and services used in internationalization strategies. I suggest the second as a better option to measure the effectiveness because it captures the capability to identify correctly all the services provided by the resources available. Indeed, this is key to determining resource allocation (Bolman & Deal, 2017; Hudzik & Stohl, 2012). This proposal matches the idea that there is not the best model of practice, given that each institution must evaluate its activities based on its capacities (Hudzik, 2015c).

When HEI's commitment to the internationalization process is high, there is space and time to properly identify and allocate existing resources and productive services to meet institutional targets. So, the higher the commitment to the internationalization process is, the more cost-effective the strategies will be implemented. Indeed, proper effectiveness assessment also depends on the capacities of an HEI to be aware of what she can do. This relation matches the ideas discussed by Dr. Brustein (Leventhal, 2017) and the suggestions made by Jones (2019) to increase the success of a new SIO and the selection of the SIO in the University of Calgary to implement its Eye High strategy (Marshall & Ruwanpura,

2019). All the ideas presented suggest that an internationalization process conceived as a long-term journey is more likely to produce cost-effective results.

### **Conclusion and Discussion**

The internationalization of higher education involves several resources, and success depends on how properly the selection and allocation are made. The HEIs have their resources but can also get more from the environment, locally (and nationally) or internationally. Both the local/national and international environments offer amenities, alternatives for alliances, knowledge, funding, and other resources. However, the effectiveness when getting those resources depends on the capacities within the HEIs.

There is little literature about the usage of financial and non-financial resources in the internationalization process and how to measure the effectiveness of strategies. The current methodologies are still limited and need to be improved (Gao, 2015; Green, 2012). However, being aware of the existing resources and productive services within the HEIs and using them in internationalization is a good signal of effectiveness.

In general, the cost and effectiveness of the strategies implemented for internationalization depend positively on the capacities (resources and the services they produce) available with the HEI. Specifically, the effectiveness is related to the degree to which an HEI uses its ability. Being effective means also that senior managers, including the SIO, have the skills to identify and use what the resources offer. Two questions come up from this: (a) when selecting an SIO, is it better to search within the HEI or outside? (b) does the answer to the previous question depend on the degree (phase) of the internationalization of the HEI?

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