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Factors affecting transport privatization: An empirical analysis of the EU



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ABSTRACT

Keywords: Transport privatization Policy transfer Environmental policy Transport sustainability European Union (EU) Addressing the long-term sustainability challenge in the policymaking process requires close engagement of private firms—particularly in the green innovation area—along with other actors. Involvement of private firms in the implementation of privatization policies is encouraged by national governments, as it is believed that such engagement will help in producing more sustainable solutions. Transport is a key sustainability issue, where a sound privatization policy could positively affect the transport-related environmental efficiency and sustainability. In this context, the policy transfer process can provide a strong impetus for further growth of transport privatization. Little attention, however, in the literature and practice has been devoted to analyse factors affecting the policy transfer phenomenon in transport privatization policies. This paper, hence, aims to investigate the relationship between policy transfer and transport sustainability via privatization. The paper hypotheses that both economic and institutional determinants increase the effect of policy convergence. As the case study context, the EU is placed under the microscope, and a dyadic dataset on transport policies is analysed. The findings indicate that institutional and economic variables play a highly critical role for policy transfer in achieving transport sustainability in the EU.

1. Introduction

Transport externalities, such as air pollution, have become a key problem for many countries across the globe (Mahbub et al., 2011; Arbolino et al., 2017, 2018). In both developed and developing world, air quality in populated cities has been deteriorated and, in this context, mobility activities have a major role in generating externalities. As a major greenhouse gas (GHG) emitter—third in the world after the USA and China—, in 2007 the European Union (EU) member states adopted the 2020 strategy for cutting down GHG emissions. Later on in 2016 the EU ratified the Paris Agreement committing the slowdown of the global average temperature hike (Liobikienė and Butkus, 2017).

The effectiveness of environmental policies represents a contested matter (Szopik-Depczyńska et al., 2017). At the EU level, for example, Fura and Wang (2017) highlighted the difficulties in achieving a common environmental goal in the EU, because of significant disparities in member countries' socioeconomic status—this issue is also raised by Lerro and Schiuma (2015) and Navarro

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et al. (2015). By utilising the data from various established US state level databases, Almer and Winkler (2017) found very little evidence for an emission reduction since the Kyoto Protocol, adopted on 11 December 1997. The gap among territories in terms of transport and logistics services could lead to a failure of environmental sustainability policies.

Even though numerous scholars have focused their research on transport-related environmental consequences (Kamruzzaman et al., 2014, 2015), less attention has been devoted to the linkage between transport privatization and environmental sustainability, and this might seem surprising given the relevance and importance of the problem. Transport privatization, traditionally, is perceived as a vehicle to lower the pollution level as a consequence of private firms' innovation (Costantini et al., 2017), and improvements in the fuel efficiency and load factors (Lin and Omoju, 2017).

Additionally, the economic literature emphasizes the role that innovation plays on the building of a green society (Nidumolu et al., 2009). The ability to innovate in the domain of sustainability is, therefore, a key factor in the success and long-term survival of a firm. Thus, a stronger participation of the private actors in transport systems is a key factor in order to achieve environmental policy targets (Ioppolo et al., 2016).

Previous studies highlighted the role of privatization in implementing environmentally oriented transport policies (Banister, 2000). This paper attempts to fill the gap in transportation research by focusing on factors affecting the policy transfer phenomenon in the transport privatization policies. In what follows, using both a multivariate technique and a classic convergence analysis, the paper investigates, in novel way, the relationship between transport privatization programs, spreading in the EU through policy transfers, and sustainability of mobility related activities.

In other words, it analyzes the role of policy transfer as a useful mechanism in the EU's process of public services privatization that targets to achieve a more efficient and sustainable transport system. By analysing the economic and institutional determinants, the study offers insights useful for the alignment of the EU member countries to the EU Directives, in order to achieve a common environmental sustainability target. The main policy insight of our framework is that, in order to achieve a more sustainable transport system, policymakers should pay further attention to the policy transfer process in spreading transport privatization programs.

The paper is structured as follows. After this introduction, the second section discusses several good examples of environmental policy transfer in mobility sector and focuses on the benefits of privatization in terms of transport services sustainability. In the third section, we suggest economic and institutional determinants in order to describe the choice of the EU member states to emulate a policy already implemented by another one. The fourth and fifth sections describe the methodology and provide the econometric analysis, respectively. In the final section, we discuss the findings and provide policy suggestions.

2. Environmental sustainability, transport privatization programs and policy transfer

The objectives of the institutions in charge of planning, financing and operating transport activities have shifted over the years. Starting in the 1960s, efficiency was no longer the only goal of transport policy. Social goals such as environmental sustainability (Dizdaroglu et al., 2012), national competitiveness, technological leadership, and economic development became increasingly important (Button, 2010; Stough and Rietveld, 1997). In this context, neoliberal ideas inspired new policy models, like privatization. Despite the myriad topics included in the transport literature, surprisingly little attention has been given to analysing the impact of privatisation policies on environmental sustainability of mobility sector.

In many countries throughout the world, particularly in key network industries, since 1970s there has been an increase in so-called privatization—i.e., the sale of state-owned companies to the private sector. For example, in Europe, the process began under the UK's Thatcher government, and has involved almost all of the European countries. In the case of transport services, market liberalization, deregulation and privatization have become a global trend even though, in light of the strategic importance of this sector, many of the EU governments undertook only partial privatizations.

During the last two decades, worldwide national states have followed different privatisation strategies and policies due to their different political and socioeconomic characteristics (Gong et al., 2012). This is also the case in the EU, which types of privatization differ from one member state to another. In the EU transport privatization policy, the main objectives include: (a) Deepening the EU integration (Clifton et al., 2006); (b) Cutting public subsidies, and; (c) Enhancing competition to achieve lower price and better-quality services, particularly in aviation and rail that were previously dominated by public monopolies (Becker, 2007).

In order to introduce the issue of privatization and transport related sustainability, we start by examining two of the most relevant examples of the neoliberal EU policy in the mobility field: (a) Airport privatization programs, and; (b) Railway sector reforms.

In the European air transport market, a judgment of the European Court of Justice (The Nouvelles Frontières Judgment of April 1986) initiated a process of deregulation and privatization. Following this development, airport privatization started in 1987 in Britain with the sale of seven major airports to British Airports Authority. According to air transport literature, a majority private ownership promotes operational and environmental efficiency of airport services (Rolim et al., 2016). In a network with complementary take-off and landing services, as this is the case for air transport, privatization leads to reduced congestion and increased environmental performance of the whole system (Matsumura and Matsushima, 2012).

In the European railway sector, British Rail privatization took place through a long process lasting from 1979 to 1997. At EU level, this experience is worthy of note, not only because it is very innovative, but also because it was inspired by reforms in sectors other than transport. British policymakers opted to transfer the experiences of the privatization of other public services at a national level, such as telecommunications, gas, and electricity, to the field of rail transport services.

Analysis of the benefits of privatization process in terms of services sustainability does not provide a clear-cut answer. Due to a lack of adequate empirical evidence, it is difficult to determine a priori if privatization programs will diminish environmental impacts of transport services (Fink, 2013a). Scholars mainly discussed the environmental benefits and pitfalls of transport services

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