



Institutional Sustainability in the Transport Sector

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Abstract

In literature concerning transportation little attention has been devoted to the institutional aspects involved in the strategic interaction between the Central Government and its local bodies. Scholars and practitioners analysing problems related to transport impacts on territory, generally disregard the big complexity tied to the relationship of institutions involved in management of transport systems. This paper aims to lay the foundation to analyse the issue of efficient coordination between different institutions involved in defining and implementing economic policies in transport sector. The institutional sustainability in transport field implies promoting efficient transport utilization and satisfy in adequate way the transport demand that often do not find answer in traditional patterns of political organization. In this paper we will try to give to the readers some insight to stimulate future economic works and motive the public and private institutions to deepen the themes of political legitimacy, economic efficiency and social representation, as well as functional effectiveness.

Keywords: transport policy; institutional sustainability; environment

1. Introduction

By the concept of ‘institutional sustainability’, we mean the efficient coordination between different institutions defining and implementing economic policies.

In transport and mobility sector, the expansion of the range of actors in transport policy and operations has induced an institutional environment which may have several problems of institutional sustainability, caused by political difference between local and central government or by relevant economic differences between the several areas of a country. From the point of view of land use and infrastructure planning, the expansion of number of policy makers in transportation field has extended the cost and time required to obtain implementable infrastructure decisions.

The several steps between the conceptualization and the realization of infrastructure projects have stretched due to the strong fragmentation of the institutional environment. Moreover this fragmentation has increased difficulty in evaluate the multifaceted dimensions of the costs and benefits regarding more and more wide social areas (Carlucci et al., 2017). The overlapping of political powers

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causes allocative inefficiency, increases negative impact of transport activities on the use of natural resources and stresses interregional economic imbalance.

From an economic point of view, institutional sustainability requires a full coincidence of costs and benefits of the decisions of political institutions (Haynes et al., 2005). This means that social benefits coming from making decisions and implementing politics programs must fall on the same citizens that bear the relative costs.

In transportation and mobility sector widespread negative externalities may lead to problems of institutional sustainability that cause considerable difficulties in implementing politics decisions due to the opposition by local communities fearing sacrifice on their part (NIMBY syndrome).

However for decisions related to national level priorities, such as national defense or large infrastructure, the appropriate level is the central, even if the costs and benefits do not accrue to the nation as a whole. This occurs frequently: think, for instance, to immigration policies that, if too light, produce negative effects for the citizens living near national frontiers, or to infrastructural planning that may concentrate costs on the space, spreading benefit on the territory.

These issues must be considered in order to achieve allocative efficiency and institutional sustainability. Undervaluing such circumstances may determine social frictions and considerably difficulties in implementing centrally determined policies.

2. Institutional sustainability of transport policy

Rapid growth in demand of transport services in industrialized countries has not led to an adequate change of institutions for planning, financing and operating transport activities (Haynes et al., 2005). Immediately after industrial revolution era when the transport system efficiency was the key goal of transport policies, safety, environmental sustainability and, later, national competitiveness and economic development became important goals of policy makers (Stough and Rietveld, 1997). In an atmosphere of rapid technological change, the increased number of targets of transport policies have expanded the range of actors in mobility sector with a deep impact for transport institutional framework.

In the United States the ISTEA (Intermodal Surface Transportation Efficiency Act) of 1991 created MPOs (Metropolitan Planning Organizations), agencies with responsibility in metropolitan transport planning and operating. This experience is relevant in terms of the interaction and cooperation between state and local authorities. As occurred in Texas, problems of institutional sustainability may arise due to fiscal and legal barriers (Ross, 2013). However, the 1991 reform has stimulated a constructive collaboration between DOTs (Departments of Transportation) and MPOs, with significant benefits in addressing a wide array of urban and suburban transport issues. This is the result of advantages of the localized knowledge of regional planners and of advantages of centralized state government in terms of scale economies, internalization of externalities, political legitimacy and administrative uniformity (Taylor and Schweitzer, 2005).

In the United Kingdom, the 2004 Traffic Management Act (TMA) and the 2008 Local Transport Bill provided greater power for the 150 existing Local Traffic Authorities (LTA). Increasing efficiency in administration of road network was the main goal of this kind of devolution. During the 1990s, transport infrastructure policy changed drastically preferring to regulate demand road transport with the aim of making better use of road infrastructure (Santos et al., 2017). This devolution of transport powers is undertaken to increase efficiency use of the road network that can be achieved by delegating the administration of road of each jurisdiction to LTA, i.e. the authority more competent due to the advantage of the localized knowledge. Nevertheless in the early years of the reform, LTAs choose to use few of the new powers available to them. As underlined by Canning et al. (2010), the new policy strategy led to several problems of institutional sustainability, because of the conflict between traffic growth and the goal of local authorities, that is traffic regulation. In other words, UK transport policy suffers of problems of institutional sustainability due to mismatch between national and local policies.

Analyzing the case of Germany, Schöller-Schwedes (2010) notes the importance of a technical (intermodal), political and social integration of transport system. A lack of cooperation between local governments in planning and operating transport activities, in other words a problem of institutional sustainability of German transport policy, too federalist, is one of the causes of low integration of transport system. Federalist transport policy reduces efficiency in mobility sector due to low technical, political and social integration of transport network (Fan et al., 2018).

In California, Chile and New Zealand, the lack of devolution of fiscal powers created several problems in local transportation funding and tensions between transport planning and operating institutions.

Analyzing the Spanish period 1987–1996, Castells and Solé-Ollé (2005) show that both regional and central governments balance equity and efficiency in the allocation of infrastructure, but regional governments seem to prefer efficiency and the needs of local communities.

In the Italian transport sector, the effects of state-level and local-level policies overlap frequently. For example institutional sustainability issues may arise between Regions that implement environmental policy, and central government that has the competencies in the field of major transport infrastructure projects realization, in a policy framework defined at EU level.

The analysed experiences highlight that overlapping policies functions should create inter-institutional tensions, in other words, a problem of institutional sustainability.

In this context, it should be noted that the infrastructures with important geographical spillovers must be of central government competence. However, due to NIMBY syndrome, national government may have serious difficulties choosing the area in which the infrastructure must be located. At present, in industrialized countries, there are many overlapping political powers. In order to avoid institutional sustainability problems, it is desirable a higher degree of inter-institutional coordination. For example, a mechanism of environmental compensation designed and guaranteed by a local government, but financed by central government may solve problems of local communities opposition. In a political system with an efficient vertical coordination, local government could convert NIMBY effect in a local communities 'competition' to locate facilities in the their own area (PIMBY - Please in My Back Yard). In Italy, inter-institutional tensions caused many delays in the field of public infrastructures and private enterprises. Governments of towns bordering the sites identified for the construction of the plants are the main opponents of the facilities (Bolton and Foxon, 2015). For example, local government of Rosolina city opposed the power plant of Porto Tolle, in the Rovigo district. According to data from Nimby Forum, Italian neighbours politicians are the main opponents of new infrastructures construction in 89% of cases. This issue is defined as NIMTO (Not in My Terms Of Office) syndrome.

3. A conclusive note on environmental effect of institutional sustainability

Between the different sectors, the transportation and infrastructure ones are particularly concerned with the issue of institutional sustainability (Haynes et al., 2005) because of the environmental (Winkelman et al., 2010) and land use problems (Brannigan, Paulley, 2008) that might be generated by the inefficient coordination between the different institutions involved in the decision process. Moreover, as transportation field is characterized by considerable environmental externalities, the lack of coordination between different levels of governments is costly in terms of allocative national efficiency.

This issue is essential in the funding of local transport schemes and for the concept of 'transport-related social exclusion' (Preston, 2009). For instance, several local governments have the target of eco-compatible transport, funding this policy with an increase of taxes paid by local transport users. It may be happen that the difference in fiscal system between the several localities of a country leads to a problem of sustainability of transportation environmental policy.

Inter-institutional relationships have visible environmental effect. Examining the evolution of transport policy in EU and in USA, it is possible to note that, during the 1960s, environmental issue became an important transportation goal. Nowadays environmental quality is an important factor in making transportation decisions. In transport sector, the changes of political strategies depend on predominant social and cultural models (Stough and Rietveld, 1997).

In country like Italy, where there are considerable interregional income gap, stress may arise among institutions dealing with transportation issues due to the different natural resources value perceived from population. As transportation field is characterized by considerable environmental externalities, the lack of coordination between different levels of governments is costly in terms of allocative efficiency. Such a risk might be avoided through the efficient coordination between the different institutions involved in the decision process.

Literature seems assign little importance to this topic, notwithstanding its relevance. Research is needed to better understand trade-off between institutional sustainability and environmental impact of transport.

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