Available online at www.sciencedirect.com
ScienceDirect
Journal of Policy Modeling 29 (2007) 397–416
Journal of Policy Modeling
www.elsevier.com/locate/jpm

The multinationalization of the transport sector

Mario Larch *

Ifo Institute for Economic Research at the University of Munich, Poschingerstraße 5, D-81679 Munich, Germany

Received 30 June 2005; received in revised form 12 October 2005; accepted 1 December 2006
Available online 26 March 2007

Abstract

According to the *World Investment Report* 2004, the structure of foreign direct investment (FDI) has shifted towards services. Further, the composition of services FDI is also changing from trade and finance to such industries as electricity, water, telecommunications, storage, and transportation. In the latter sector, the value of FDI stock rose by 1600% between 1990 and 2002. Incorporating a transport sector that is dominated by multinationals and economies of scale in a new trade theory model leads to interesting predictions regarding the volume of trade and income and, hence, to a new set of policy conclusions. It also sheds new light on the de-industrialization debate.

JEL classification: F12; F23

Keywords: Multinationals; Transport sector; Iceberg transport costs; Economies of scale

1. Introduction

Transport services are crucial for goods trade. Hence, countries are interested in the provision of the necessary infrastructure and services. Traditionally, in many countries transport services are provided publicly. One main justification is the fact that the transport sector is characterized by very high fixed costs, leading to so-called natural monopolies. However, this judgment is based on the belief that the market for transport services is constrained by state borders. In an ongoing globalization process this is no longer a relevant restriction.

One of the newcomers engaging in transport and storage in the year 2000 is the *Deutsche Post*, which went public in the same year and now already makes nearly 50% of its sales abroad. Another example is the *Canadian National Railway Company*, which made it into the top 100

* Tel.: +49 89 9224 1428; fax: +49 89 985369.
E-mail address: larch@ifo.de.

0161-8938/$ – see front matter © 2007 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.
doi:10.1016/j.jpolmod.2006.12.007

non-financial transnational corporations (TNCs) in the year 2002 ranked by foreign assets (see the *World Investment Reports*, UNCTAD, 2002, 2004).

Comparing world inward (outward) foreign direct investment (FDI) stocks from 1990 and 2002 reveals a sharp increase of the transport, storage, and communications sector as a share of all services from around 3% (5%) to 11% (10.5%), and from around 1% (2%) to 6.5% (7%) as a share of total inward (outward) FDI stocks. The largest increase took place in the developed countries (around 8% increase in the share), whereas it was modest in the developing part of the world (around 2% increase in the share). In Central and Eastern Europe, FDI in the transport sector is especially important accounting for 24% (18.5%) of the inward (outward) FDI stocks in services and 13% of total inward and outward FDI stocks. Between 1990 and 2002 the value of inward (outward) FDI stock rose 16-fold (13-fold) there.[1]

Table 1 gives more detailed information for selected European countries. Columns one and two show that outward FDI in the transport, storage, and telecommunication sector makes up a substantial part of total outward FDI for the United Kingdom, Poland, Croatia, and Estonia. Inward FDI in the transport, storage, and telecommunications sector is substantial for even more European countries, like Estonia, Lithuania, Croatia, Slovakia, Latvia, and Bulgaria. As FDI growth outperformed trade growth for the last two decades, it is worth comparing growth of total FDI with growth of FDI activity in the transport, storage, and telecommunication sector. Columns 3 and 4 give the growth rates of total outward and inward FDI, respectively. For most countries these growth rates are two-digit. However, outward FDI for Bulgaria and Portugal shrunk over the investigated period. Comparing the growth rates for total FDI with the growth rates of FDI in the transport, storage, and telecommunication sector, we see much higher growth rates for a lot of countries. For example, in Czech Republic the average yearly growth of outward FDI in the transport sector was about 124%. For a lot of countries average yearly growth rates of in- and outward FDI in the transport sector are over 30% (Czech Republic, Estonia, Finland, Portugal, and United Kingdom). These facts suggest that multinational activities in the transport sector play a crucial role and become more and more important.

One reason for this growing importance of the transport sector might be seen in the growth of the service sector in general. Growth in the transport sector is roughly at the same pace as GDP growth.[2] The largest increase took place in road transport, however the railway goods transport also increased during the last years, but not at all in the same pace as road transport. This increase in rail transport is there in spite of a decreasing network and less rolling stock. The reason might be an increase in efficiency of the rail industry. The conclusion is that the number of ton-kilometres (tkm) by road is much greater than the tkm performed by rail.

Transport by waterways and sea, as well as air transport are much less important in most countries, but especially goods transport by air increased substantially (for example, over 100% in Spain between 1996 and 2002). And even though the volumes are small compared to other modes of transport, the average value of one tonne of air transported goods is almost always much higher than in other modes of transport.

Table 2 gives more detailed information about the 25 European Union (EU) countries as well as four candidate countries (Bulgaria, Croatia, Romania, and Turkey) and reveals the importance of the transport sector as a source of income generation. For Croatia, Estonia, Latvia, and Turkey

[1] The driving force behind the increase in FDI stocks are cross-border M&As. For more details see the *World Investment Report* 2004, which focuses on FDI in the services sector.

[2] Information about the growth in the transport sector can be found at the EUROSTAT homepage http://ec.europa.eu/comm/eurostat/.