



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Telecommunications Policy 29 (2005) 687–709

www.elsevierbusinessandmanagement.com/locate/telpol

TELECOMMUNICATIONS
POLICY

Spectrum auctions: Distortionary input tax or efficient revenue instrument?

Adele C. Morris*

U.S. Department of the Treasury, 1500 Pennsylvania Ave. NW, Room 2445, Washington, DC 20220, USA

Abstract

Spectrum license auctions are widely recognized by economists as more efficient than lotteries or administrative approaches to allocate exclusive rights to spectrum. But whether spectrum auctions are *the most* efficient spectrum policy still generates debate, in part because the answer may vary depending on exactly what is being optimized, what else is assumed or held constant, and the policies to which one is comparing spectrum auctions. This paper examines the complex confluence of US spectrum policy and fiscal policy. It concludes that economically efficient spectrum policy requires several distinct optimizations, including devolvement of an efficient set spectrum rights and the optimal approach to raising and recycling government revenue in that devolvement process. It also requires allocation policies that take into account possible distortions of the secondary market for spectrum via the capital gains tax. The paper argues that there is no compelling theoretical case or empirical evidence that spectrum auctions are distortionary, and examines cases in which the most efficient policy is to auction spectrum and “recycle” the revenue to offset more distortionary revenue instruments. This paper also examines cases in which it is most efficient to allocate spectrum rights without raising revenue, for example when transactions costs are high or distributional concerns can prevent or delay efficiency-enhancing reforms.

© 2005 Elsevier Ltd. All rights reserved.

Keywords: Spectrum policy; Auctions; Capital gains lock-in; Tax policy

*Corresponding author. Tel.: +1 202 622 1262

E-mail address: adele.morris@do.treas.gov.

1. Introduction

Spectrum license auctions are widely recognized by economists as more efficient than lotteries or administrative approaches to allocate exclusive rights to spectrum. But whether spectrum auctions are *the most* efficient spectrum policy still generates debate, in part because the answer may vary depending on exactly what is being optimized, what else is assumed or held constant, and the policies to which one is comparing spectrum auctions. In particular, discourse continues about the efficiency of spectrum auctions in generating federal government revenue. This paper examines the complex confluence of spectrum policy and fiscal policy, including the competing and complementary objectives of spectrum allocation efficiency, tax efficiency and administrative efficiency. A central objective of this paper is to paint a more complete picture of the tradeoffs across spectrum and fiscal policies so as to better envision what overall efficient spectrum policy would look like. This work leaves to a separate literature to detail the most efficient design for spectrum auctions.¹

1.1. Key points of this paper

The fiscal efficiency of spectrum auctions has sometimes been conflated with the relative merits of unlicensed and licensed spectrum regimes and other policy debates. For example, in his support for an unlicensed approach, Noam (1998) argues that spectrum auctions “inevitably deteriorate into revenue tools,” and that before long spectrum auctions may become “technologically obsolete, economically inefficient, and legally unconstitutional.” Although the need for revenue ultimately drove the political acceptability of license auctions in the US in the 1990s, the political exigency of auctions is separate from whether auctions represent economically efficient fiscal policy.² This paper seeks to clarify policy discussions about spectrum auctions and economic efficiency by showing how the overall economic efficiency of the spectrum policy system depends on (among other things) the government optimizing three key policy components:

1. The government must devolve the optimal set of spectrum rights to potential users of the resource. Allocative efficiency requires that the spectrum goes to its highest and best use. Thus the government must devolve the optimal set of rights that allow this, including devolving the optimal subsets of unlicensed and exclusive flexible rights. “Exclusive flexible rights” allow rights’ holders to determine what to produce using their spectrum assets and to sell, subdivide, aggregate, and otherwise package their assets for secondary market transactions. Exclusive rights require such flexibility in order for market forces to produce an efficient allocation of spectrum.³ A devolution of rights that is suboptimal (either in overall

¹See Crampton (2002, Chapter 14) for a review of the literature on spectrum auctions.

²See Hazlett (1998) for a history of FCC license auctions.

³For more discussion of exclusive flexible rights, see for example Hazlett and Muñoz (2004) and Rosston (2001). One possible qualification to the endorsement of market forces is that it may be appropriate for the government to retain a power of eminent domain in cases where rights must be aggregated in order to achieve a more efficient allocation. Use of such power may be best confined to cases analogous to similar interventions in other markets (such as transportation infrastructure), where positive network externalities or core public goods objectives pertain. Another case may be national emergency situations.

Download English Version:

<https://daneshyari.com/en/article/9673201>

Download Persian Version:

<https://daneshyari.com/article/9673201>

[Daneshyari.com](https://daneshyari.com)