



ELSEVIER

Journal of Public Economics 88 (2004) 503–518

JOURNAL OF
PUBLIC
ECONOMICS

www.elsevier.com/locate/econbase

Direct or indirect tax instruments for redistribution: short-run versus long-run

Emmanuel Saez*

*University of California at Berkeley and NBER, Department of Economics, 549 Evans Hall #3880,
Berkeley, CA 94720, USA*

Received 9 January 2002; received in revised form 27 June 2002; accepted 30 October 2002

Abstract

Optimal tax theory has shown that, under simple assumptions, indirect taxation such as production subsidies, tariffs, or differentiated commodity taxation, are sub-optimal and that redistribution should be achieved solely with the direct income tax. However, these important results of optimal tax theory, namely production efficiency and uniform commodity taxation under non-linear income taxation, have been shown to break down when labor taxation is based on income only and when there is imperfect substitution of labor types in the production function. These results in favor of indirect tax instruments are valid in the short-run when skills are exogenous and individuals cannot move from occupation to occupation. In the long-run, it is more realistic to assume that individuals choose their occupation based on the relative after-tax rewards. This paper shows that, in that context, production efficiency and the uniform commodity tax result are restored. Therefore, in a long-run context, direct income taxation should be preferred to indirect tax instruments to raise revenue and achieve redistribution.

© 2003 Elsevier B.V. All rights reserved.

JEL classification: H21; H23

Keywords: Optimal taxation; Redistribution; Occupational choices

1. Introduction

The theory of optimal taxation has derived a number of powerful properties of optimal tax structures. First and perhaps most important is the production efficiency result of [Diamond and Mirrlees \(1971\)](#). This result states that the economy should be on its production frontier at the optimum when the government can tax (linearly) all factors

* Tel.: +1-510-642-2239; fax: +1-510-642-6615.

E-mail address: saez@econ.berkeley.edu (E. Saez).

(inputs and outputs) at different rates. This result has two very important public policy implications. The public sector should optimize its production decisions using market prices and the government should not use tariffs, production taxes or subsidies because they create production inefficiencies. Second, [Atkinson and Stiglitz \(1976\)](#) showed that there is no need to use commodity taxation when the government can use a non-linear income tax and utility functions are weakly separable between goods and leisure. Atkinson and Stiglitz proved their theorem using a fixed priced model with perfect substitution between different types of labor. These two results combined imply that indirect tax instruments such as production subsidies, tariffs, or differentiated commodity taxation, are sub-optimal and that redistribution ought to be achieved solely with the direct income tax. Third, [Diamond and Mirrlees \(1971\)](#) showed another important result for the theoretical analysis of optimal tax structures, namely that optimal tax formulas are identical when prices of factors are fixed, as in a small open economy, and when prices are variable and derived from a general production function. This result is important because it implies that substitution between inputs in the production function can be ignored when deriving optimal tax formulas. This simplifies considerably the analysis. From now on, we call this result the Tax-Formula result.¹

However, these three important results of optimal tax theory have been challenged by subsequent studies. [Stiglitz \(1982\)](#) has developed a simple two-type model (skilled and unskilled workers), where the government cannot observe workers' skills and has to base taxation on income only. In that situation, the government cannot impose freely differentiated tax rates on each type of labor as in the Diamond–Mirrlees model and the Tax-Formula result breaks down. In the model of [Stiglitz \(1982\)](#), there is imperfect substitution of labor types in the production function and the optimal tax formulas depend explicitly on the elasticity of substitution between skilled and unskilled labor. [Stiglitz' \(1982\)](#) point is important because it shows that the standard properties of the optimal non-linear income tax model of [Mirrlees \(1971\)](#), such as the zero top result or the positivity of the marginal tax rate, obtained under the assumption perfect substitution between labor types are not robust to the relaxation of this assumption. Recently, [Naito \(1999\)](#) has shown that, in the framework of the [Stiglitz \(1982\)](#) model, the production efficiency result of [Diamond and Mirrlees \(1971\)](#) and the theorem of [Atkinson and Stiglitz \(1976\)](#) on commodity taxation also break down. The production efficiency result breaks down because the government cannot apply differentiated rates on each type of labor and thus the taxation power of the government is restricted compared to the Diamond–Mirrlees model.² The Atkinson–Stiglitz Theorem breaks down because of imperfect substitution in labor types.

Therefore, relaxing two questionable assumptions of the standard model is enough to loose the three main results of optimal taxation theory. The first of these two assumptions is perfect substitution of labor inputs in the production function. The second assumption is the possibility to condition wage income tax rates on labor type. From now on, this second assumption is called the labor types observability assumption. Both the Tax-Formula result

¹ This result has received much less attention in the literature than the previous two results because it does not have such important practical policy implications.

² [Guesnerie \(1998\)](#) provides an analysis close to [Naito \(1999\)](#) along those lines.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات