

Flat Tax, FDI and Government Spending

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Over the last 15 years waves of flat tax reforms have been rippling across the transition economies of Eastern Europe. Resulting economic consequences, globalization and special interest activities have spurred debates among politicians and economists in the U.K., Germany, the U.S., and elsewhere. This essay investigates the potential efficacy of flat tax reform in the U.S. with public choice tools. In this paper I develop two testable hypotheses to study the effects of the flat-tax proposal. The sections below include: 1) facts on tax reforms, 2) public choice analysis of the flat tax reform, and 3) two testable hypotheses.

1) Facts on Tax Reforms

The Coolidge tax cuts, which reduced the top rate from 73% to 25% during the 1920s, produced average 6% GDP growth in the U.S. The tax revenues grew by 61% in the same period. Somewhat similar were the growth effects after the Kennedy tax cuts in 1960s (GDP grew by 5%) and the Reagan tax cuts in 1980s (GDP grew by 4%, although 1980s were also accompanied with high fiscal deficits). None of these tax cuts were flat-tax reforms, but each significantly flattened tax rates¹.

One of the first adopters of the flat tax was Hong Kong in 1947. Many credit Hong Kong's economic prosperity to non-interventionist policy of its government and to flat rate taxation. Estonia adopted the flat tax rate of 26% in 1994 to encourage foreign capital inflows and capital accumulation. By 2003 its foreign direct investment (FDI) ratio over GDP reached 10.2%. The competition for FDI flows became fierce after Russia approved the 13% flat tax. It prompted Estonia to lower its flat tax rate to 20% at the start of 2007. By today's count Lithuania, Latvia, Ukraine, Slovakia, Georgia, Romania and

¹ Hall and Rabushka (1995)

Serbia have also reformed to flat tax regimes.² Many of these countries shared similar ex ante problems with tax collections, FDI, budget deficits and transition to the free market system.

Milton Friedman in 1962 argued for adoption of flat income taxes in the U.S., with exemptions and refunds.³ Then, in 1981, Robert Hall and Alvin Rabushka proposed the combination of flat VAT and flat income taxes.⁴ The presidential candidate Steve Forbes in 1996 included the flat tax reform in his platform and popularized the idea of income tax filing on a postcard size form. Neither of these flat tax ideas has been implemented in the U.S., though during last 25 years the U.S. did have several tax reforms. Not all of them represented movement towards the improved efficiency of the tax system.

The reform of 1986 was far more radical than any other since then. It reduced the top income tax bracket from 50% to 33% and eliminated 12 brackets, bringing the number of brackets to 3. It also eliminated famous tax shelters and therefore expanded the tax base. Then the reforms of 1993, 1997, 2001 and 2003 introduced more brackets (now the U.S. has six tax brackets) and more opportunities for tax avoidance and evasion.⁵ The mounting federal budget deficits have increased pressure towards more efficient tax systems, but any tax reform has to deal with groups that would potentially win or lose out during the transition. These transition issues increase the costs of the reform and may offset the theoretical efficiency gains of the particular reform.

2) Public Choice Analysis of the Flat Tax Reform

Economic theory offers a standard welfare loss analysis of taxation. Since all taxes produce deadweight losses, the choice of taxation system offers possibility to minimize the social welfare loss.

² Greco (2004)

³ Friedman (1962)

⁴ Hall and Rabushka (1995)

⁵ Gruber (2004)

Frank Ramsey devised the rule of optimal taxation on commodities in early 20th century; the “Ramsey tax” equates the ratio of marginal deadweight loss to marginal revenue across commodities. It also implies an inverse elasticity rule which states that tax rate should be proportional to the inverse of the demand elasticity of a good.

Applying the same rule for optimal taxation of income across individuals with different income levels and with the same diminishing marginal utility function of income, where the society’s aggregate income is fixed (later this assumption is relaxed), we get the taxation that produces the same after tax income for everyone. It implies negative taxes for the poor and high taxes for the wealthy. In fact, in 1945, the top tax rate in the U.S. was 94%. But the assumption of fixed income is not realistic, since higher taxes discourage labor supply and income generation. The famous *Laffer curve* indicated that excessive tax rates will reduce tax revenue due to behavioral effects such as tax non-compliance and working less. Therefore, optimal tax policy faces a trade off between equity and efficiency. Overall result of optimal tax policy still suggests higher tax rates on the rich and lower rates on the poor. Consequently, tax systems that promote hard work, savings, and risk-taking are considered to be more efficient.

Tax revenue responses on the higher income taxes primarily stem from the reporting, income exclusion and compliance effects, rather than from the gross income changes. One of the estimates offered is a 5% decrease in tax income base for each 10% increase in the tax rates.⁶ The biggest share of the losses comes from the rich, who have better ability to manage income reclassifications for tax purposes. At the same time, low and middle-income families have fewer choices. They are restricted only to increases of charity contributions and mortgage interest payments. Moreover, their income is mostly

⁶ Kopczuk (2004) studied the sensitivity of tax base to tax rates.

derived from wages and taxes are withheld directly through employers. More efficient tax system although raises the size of the government, it also produces the infra-marginal welfare gain, shown by Borcharding and Lee (2004), contrary to what Becker and Mulligan (2003) discovered.

Interesting public choice implications could be drawn as well from the political market behavior changes under the different tax regimes. The Wicksellian Unanimity⁷ rule suggests imposing 75-90% majority voting on tax laws. This could be incorporated in new tax reform to reduce future possibilities of rent seeking, at least from the taxation side but not from the spending side. Due to the fact that the VAT systems were added, but not substituted in for income taxes, many European countries, Borcharding and Lee (2004) propose capping income tax rates constitutionally.

Income vs. Consumption Tax

According to the Thomas Hobbes “It is fairer to tax people on what they extract from the economy, as roughly measured by their consumption, than to tax them on what they produce for the economy, as roughly measured by their income.”⁸

The main argument in support of the consumption tax hinges on the promotion of savings and investment. Tax on consumption would discourage consumption and increase a share of income that is allocated to savings. The problem though is that a tax base of the consumption tax, if applied to sales, is smaller than a tax base for income tax. Therefore, to raise the same amount of tax revenue, the reform would require the higher rates of consumption tax than existing income tax.

⁷ Wicksell (1967)

⁸ Thomas Hobbes wrote it in his famous “Leviathan.”

The rationally ignorant voter behavior depends on the cost of acquiring the information on proposed policies. If the voter understands the effects of taxes on her own consumption and savings, she will impose more political limits on legislators. For example, income tax effects are much more obvious and personal to each voter than value-added taxes (VAT) collected in each stage of production, even though they are ultimately paid by the consumer.⁹ Thus, income taxes would be more efficient than VAT to limit legislator misbehavior.

The income taxes are criticized for their negative effect on work, savings and investments. But savings and investment could be exempted from taxation as proposed by Hall and Rabushka (1995).

Consumption equals income minus savings, and it would be virtually the same to collect consumption taxes through income taxes with savings exemption. The partial exclusion of savings from taxation already exists in the U.S through the 401(k) and IRA retirement saving plans.

Moving from income base to consumption base taxation has transition problems. It taxes twice the middle aged and older individuals. At first, their income is taxed and second time, after the reform, they pay tax at the moment of consumption. Therefore, it is politically costly to politicians to support this reform. Also, the neutral flat consumption tax reform would require 35% sales tax rates.¹⁰ Such a high tax rates would induce tax evasion and sale of goods through “black markets.” It would be much harder to track consumption than withholding income tax from wages.

Other negative effects of the consumption taxes include cascading. This occurs when businesses buy some intermediate goods at retail stores. This, of course, increases distortions in the economy.

Cascading and compliance issues are resolved by the type of consumption tax called “value-added tax”

⁹ Mr. Mack, the member of President Bush’s tax advisory commission, called value-added taxes “money machine,” which meant that politicians will be able to raise taxes without much political cost to them.

(VAT). This tax is levied at each stage of production and theoretically¹¹ eliminates both- cascading and compliance issues. On the other hand, in practice, according to Slemrod and Bakija (2000), VAT is costly to administer, especially if there are many exemptions.

The vertical equity of the flat tax is questioned by looking at the savings rates of different income brackets. The wealthy save more, the top 1% income earners save 50% over their lifetime, while lowest 20% income earners save only 3%. If all incomes were taxed with the same rate, the poor would bare a bigger tax burden. In this sense, pure flat taxes are regressive.¹²

3) Two Testable Hypotheses

Hypothesis 1: Over time flat income tax rates will decline and also force reduction in the ratio of government spending relative to GDP. This would happen due to the desire of most taxpayers to pay less tax and inability of any one group to impose different tax rates on others.

Testing methodology: (1) Analyze available data of Hong Kong, Estonia and others. Check changes in the ratio of government spending/GDP after the adoption of the flat tax; (2) another way to infer the effectiveness of the flat tax would be to see if budget deficits decline over time due to the constraints imposed on legislators.

Hypothesis 2: Adoption of a low flat tax increases FDI and improves terms of trade (export prices/import prices), effect of the transfer price changes by multinationals.

¹⁰ Gale (1999)

¹¹ Slemrod and Bakija (2000)

¹² Dynan et al. (2004)

Testing methodology: Check the available data on Estonia, Russia and others. If there is enough data use OLS regressions or other estimation methods.

Conclusion

The public choice analysis conducted in this essay suggests that flat income taxes will produce welfare gains, due to infra-marginal gains, and indirect effects such as higher compliance, simplicity and constraints placed on legislators. Most difficult obstacles to tax reforms arise from the transitional problems, such as the opposition of losing parties from the elimination of tax shelters and resistance of legislators to limit their ability of rent seeking.

More research is needed to answer questions such as these: (i) why are most countries that adopted flat taxes transition economies? (ii) Do countries adopt flat taxes to lure FDI, jump-start the investment and growth in the highly competitive global economy? (iii) Do flat tax reforms materialize expectations?

References:

- Auerbach, A.J. (1997). "The Future of Fundamental Tax Reform." *American Economic Review*, 87:2, (May) 143-146.
- Becker, G.S., and Mulligan, C.B. (2003). "Deadweight Costs and the Size of Government." *Journal of Law and Economics* 46:2 (October) 293-340.
- Borcherding, T., and D. Lee, "Why Isn't the U.S. Ready for the V.A.T.?" Claremont Colleges Working Paper.
- Dynan, K.E., J. Skinner, and S.P. Zeldes., (2004). "Do the Rich Save More?" *Journal of Political Economy* 112 (April):397-444.
- Friedman, M. *Capitalism and Freedom*. (1962) Chicago: University of Chicago Press.
- Gale, W.G. (1999). "The Required Tax Rate in a National Retail Sales Tax." *National Tax Journal* 52 (September): 443-57.
- Greco, A. (2004) *Flat Tax –The British Case*. Adam Smith Institute: London.
- Gruber, J. (2004). *Public Finance and Public Policy*, New York: Worth Publishing.
- Hall, R.E. and A. Rabushka. (1995). *The Flat Tax*. Stanford: Hoover Institute Press.
- Hall, R.E. (1997). "Potential Disruption from the Move to a Consumption Tax." *American Economic Review*, Vol.87, No.2, (May), 147-150.
- Hubbard, R.G. (1997). "How Different are Income and Consumption Taxes?" *American Economic Review*, Vol. 87, No. 2, (May), 138-142.
- Johnson, D. B. (1991). *Public Choice: An Introduction to the New Political Economy*, Bristlecone Books, Mayfield Publishing Company.
- Kopczuk, W. "Tax Bases, Tax Rates and Elasticity of Reported Income." As of 2004, under revision and resubmission to the *Journal of Public Economics*.
- Slemrod, J. and J. Bakija. (2000). *Taxing Ourselves: A Citizen's Guide to the Great Debate over Tax Reform*. Cambridge, MA: MIT Press.
- Surowiecki, J. (2004) *The Wisdom of Crowds*. Random House, Inc.: New York
- Wicksell, K. (1967). "A New Principal of Just Taxation," in *Classics in the Theory of Public Finance*, eds. R.T. Musgrave and A.T. Peacock (New York: Martin's Press).