

## **OPTIMAL TAXATION – A QUESTION MARK FOR ALBANIAN**

**Entela VELAJ** 

Lecturer, University “Aleksandër Moisiu”, Faculty of Business, Durrës, Albania

entelavelaj@yahoo.com

**Olta NEXHIPI**

Lecturer, University “Aleksandër Moisiu”, Faculty of Business, Durrës, Albania

olta.nexhipi@gmail.com

### **Abstract**

*This study gives a theoretical perspective on tax efficiency in the Albanian taxation system. We discuss about the income from taxes, consumption and foreign direct investment for the period between 2000 –2014. The objectives of this study are to explore impact of direct and indirect taxes on GDP and on total income of the taxation system. Taxation system in most of the cases depend on a country legislation, which can help in increasing foreign direct investments of decreasing them, authors bring in the study the Albanian legislation position related to foreign direct investments. The study concludes that Optimal taxation models face lots of restrictions and proposals. Also there is the problem of time inconsistency of optimal fiscal policy or even political changes of the country. So in the design of optimal fiscal policy should be taken too into account the credibility of the individual to the political system*

*Keywords: indirect tax, direct tax burden surplus, optimal taxation system, tax efficiency*

### **INTRODUCTION**

The optimal taxation depends from the ratio between efficiency and justice. From the theoretical point of view the right taxation is the one that guarantees a desirable social distribution of the excess burden of taxation. While the efficient taxation is the one that has the lower excessive burden. Meanwhile we can say that the fair taxation system is the one that gives equal liabilities to people that have the same payment power and the efficient one is the taxation system that takes low administrative expenses. In many taxation models we see that the tax collection costs

are equal to zero but in reality the tax collection has its own costs. Tax authorities have their own costs for tax collection purposes.

Tax preparation for the tax payer is a process that also costs. The tax payer pays for the accountant, for juridical advises on taxes, pays time for the preparation of tax payment, etc, costs that do not equal zero. The taxation system can be efficient and right if we refer to excess burden, but if the administrative costs are very high or their collection can be complicated it is not preferred. There does exist a taxation system without cost but there exists a taxation system that can bring in equilibrium the excess burden and the administrative costs.

The objective of this study is to analyses different taxation systems that are used in Albania, and viewed the performance of tax revenue and foreign investments in Albania during the years. We will look at the tax structure in Albania and the share of various taxes in total tax revenues or as a percentage of GDP in order to propose the best one, which can fit the interest of the country economy.

The optimal design of a taxation system is a topic of interest for many researchers in taxation field and in economy. The standard theory of taxation states that the taxation system that is chosen from a state should maximize the social wealth due to some restrictions.

## LITERATURE REVIEW

There have been many studies on taxation system, but three of them can be considered as the basis on optimal taxation; Ramsey (1927) on linear taxation of products, income increase and distribution, Pigou (1920) on linear taxation of products, with the purpose of correcting externalities and Mirrles (1971) nonlinear taxation of products.

### Optimal taxation of products

Frank Ramsey gave a very big contribution on the theory of products optimal taxation. He states that we don't have to apply the uniform taxes on various goods, we should apply an amount of tax that would affect the reduction of demand for them in the same proportion. In his study he showed that to minimize the tax burden should be set such of tax rates that the reduction in% of required quantity of goods to be the same (assuming that the benefits are not related to one another).He showed that Optimal tax theory or the theory of optimal taxation is the study of designing and implementing a tax that reduces inefficiency and distortion in the market under given economic constraints. This was called the Ramsey rule and is related to the inverse rule of elasticity. In such conditions if we sign as  $\epsilon_x$  the elasticity of demand for product X and  $\epsilon_y$  for the product Y and the taxation norm as  $t_x$  and  $t_y$  then the Ramsey Rule would be written as it follows :  $\epsilon_x t_x = \epsilon_y t_y$  it can also be expressed as  $t_x / t_y = \epsilon_y / \epsilon_x$

So to have a tax burden as low as possible, which means a more efficient tax, should be imposed higher rates of taxes on goods relatively inelastic.

Corlett and Hague (1953) state that there is a rule in the economics of optimal taxation, which follows the second best approach and states that optimal taxation can be achieved by taxing complementary goods of leisure, thereby reducing the distortion of labor supply incentives. It was developed by W.J. Corlett and D.C. Hague in 1953 and is derived from the principles of optimal taxation derived by Frank P. Ramsey. The Corlett-Hague rule has multiple applications in tax policy such as in commodity taxation or capital income taxation.

Pigou (1920) offered a model in which he suggested that the existence of externalities creates a difference on social costs of consumption and private costs, this is why governments interfere through taxes or subventions. External cost analysis is applied in environmental economics, according to which corrective taxes should be used for fighting and minimizing negative externalities. Another important application in the optimal taxation of products is savings taxation. Consumption in a future period can be interpreted as a product supply. Atkinson and Sando (1980).

James Mirrlees (1971) introduced the second group of optimal taxation theories. In the primary model people differ in their ability to gain money. This is why a government ability to collect income depends on the born ability of people to create income and on their try to increase their wealth. According to Mirrlees the optimal taxation problem is a game of the imperfect information between government and taxpayers. The government would like to collect taxes from people with high wealth and distribute it to others with low wealth. It also tries to decrease the informality, meaning promote people with high wealth not to hide it. So a taxation system should offer a sufficient promotion for people with high wealth. Optimal taxation system according to Mirrlees implies that optimal taxes are nonlinear and are connected to the asymmetry of information and productivity of different people. When we try to apply this model as a taxation system we notice that the nonlinear model is difficult to be applied.

Stern (1987) states that is difficult to evaluate systems but if we have knowledge on elasticity we have a good information. To understand a small change in a given tax, is needed to know the actual function of demand and its derivate. The optimal taxation system should take in consideration not only the cost and its efficacy but also its effect on consumer wealth distribution, this is why optimal taxation for luxury products is higher than necessary products.

According to Feldstein (1978) the elimination of taxes on capital income, and their replacement with higher taxes on labor would reduce government taxation costs by 18%. Feldstein divided the products based on their consumption date. He builds a model with two periods and three products; the first period of consumption, first period of leisure, and second

period of consumption. He supposes that an individual chooses how much he will work only in the first period. He doesn't work in the second period. Based on this the government must increase income with a fixed value in the actual period and can collect better taxes for both periods.

According to this theory the optimal taxation model depends on the substitutability of leisure consumption for each period. If for the first period the replacement for the leisure is higher than it has to be taxes relatively low. But if for the second period the consumption is relatively more substitutable then it is needed a subvention on capital. If for both periods the replacement is equal then the tax on capital income should be zero, the norm of consumption tax on the first and the second period should be equal.

If  $C_1$  and  $C_2$  are consumption on the first and the second period and  $T_1$  and  $T_2$  represent the taxation norms for each period,  $\dot{W}$  represents the wage level,  $L$  stands for the leisure and  $R$  represents the norm of interest then the budget constraint of an individual should be written as it follows;

$$\left[ C_1(1 + T_1) + C_2 \frac{(1+T_2)}{1+R} \right] + \dot{W}L = \dot{W} \quad (1)$$

If  $T_1$  equals  $T_2$ , then equation 1 can be written as :

$$\left( C_1 + \frac{C_2}{1+R} \right) = \dot{W}(1 - L) \left( 1 - \frac{T}{1+T} \right) \quad (2)$$

$$\left( C_1 + \frac{C_2}{1+R} \right) (1 + T) = \dot{W}(1 - L) \quad (3)$$

If both periods have an equal tax of consumption then from equation (2) we can notice that the wage tax ratio would be  $T/1+T$ .

But if the periods are taxed under different norms then we derive the equation (1) based on  $C_2$  and we have:

$$C_2 = \left[ \dot{W}(1 - L) \left( 1 - \frac{T_1}{1+T_1} \right) - C_1 \right] \left[ (1 + R) \left( 1 - \frac{T_2 - T_1}{1 - T_2} \right) \right] \quad (4)$$

We can see clearly from equation (4) that when  $T_2$  exceeds  $T_1$  the income coming from capital is taxed with a positive tax, while when  $T_1$  exceeds  $T_2$  then the income coming from capital should be subsidized.

### Excess burden of taxation

Excess burden of taxation is considered as a loss of wealth or loss of efficiency. Excess burden is created because of economic decision deviation after a tax decision. For example a tax on wage can discourage the working process and encourage its replacement in the leisure. If the

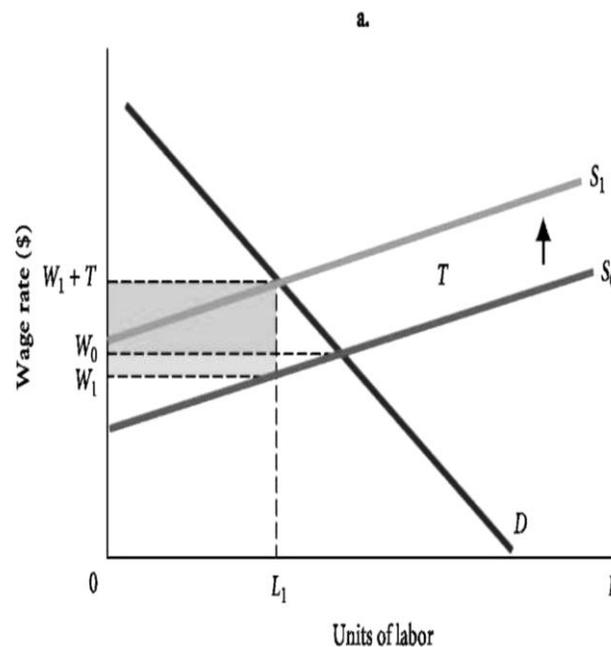
taxation norm would be low, the replacement we mentioned would create a low excess burden, thinking that there will be no other changes. This comes as the result of the job replacement which is not taxed and is equal to the difference on return before taxation with the after taxation. If the taxation norm would be high then the excess burden or the social cost will have a high value, and it may have a higher value than the collected income.

We define job as a good and the wage as its price. This is why the burden of this tax depends on the market demand and supply. If we refer to the graphs the job supply is represented from the employee and the job demand from companies (Mankiw, 2009).

In the vertical axes we find the wage norm ( $W$ ) while horizontally we find the working hours ( $L$ ). ( $T$ ) represents the taxation norm on wage level. In figure 1 taxation norm is higher than in figure 2 and also the supply curve is more elastic than in figure 2. In the first equilibrium, before taxation, people are ready to work ( $L$ ) hours and companies offer to pay a  $W_0$  wage.

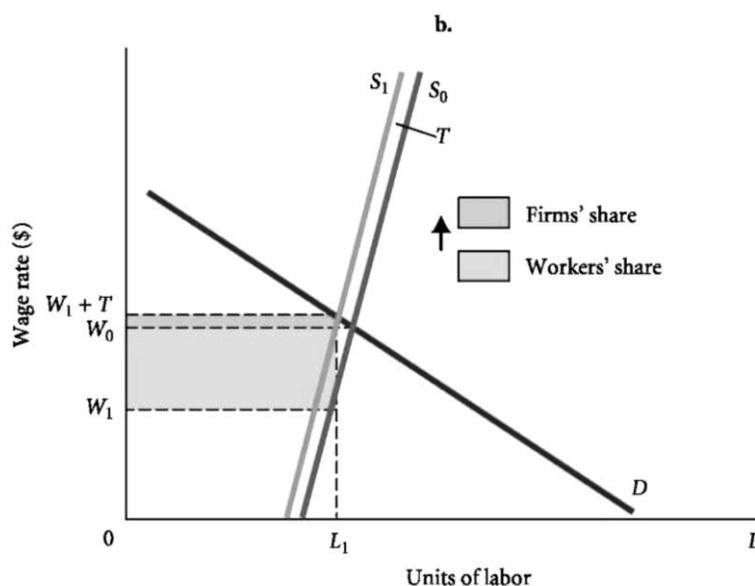
After taxation we notice that the job supply from the employees has decreased. The decrease in job supply increases the wage value paid by the company  $W_1+T$ . On the other hand the employee gets income from the wage after tax application with  $W_1$  value.

Figure 1: wage taxation with an elastic supply curve



Source: Jeffrey M. Perloff, 2004, third edition, *Microeconomics*, published by Pearson Addison Wesley, pg 308

Figure 2: Wage taxation with a no elastic supply curve



Source: Jeffrey M. Perloff, 2004, third edition, *Microeconomics*, published by Pearson Addison Wesley, pg 308

In figure 2 we can notice that when supply is a bit more elastic than demand, it takes the highest tax burden. The biggest part of tax burden is on the market as long as it reacts after the tax application. The wage tax affects the job demand. This is why companies will have a higher cost and they will decrease the number of employees or the production quantity.

In his two researches on efficiency Harberger (1964a) and (1964b) shows how we can measure burden surplus and how we can apply this models in USA. His findings were used to show deviations on economic decisions and the impact taxation has in the society wealth changes. The change on the labor market was studied by Browning (1975) the impact of taxation on corporation was studied by Shoven (1976) and the change in consumption was researched by King (1983).

## ALBANIAN TAXATION STRUCTURE

Referring to the table below we can notice that total income from taxes for the period 2013-2014 have increased with 12.01%. we can also notice that the biggest part of this taxes is collected from consumption taxes, followed by social contributions, income taxes, and then other taxes. Their structure has been changed as we can notice that consumption taxes have decreased with 1.2%, while social contributions are increased by 1.23%

Table 1: Albanian taxation structure for 2013

Taxes	In million	% e GDP	% income on taxes
Consumption taxes	155,887.70	11.42	51.98
Income taxes	46,664.00	3.42	15.56
Social contribution and health	58,473.70	4.28	19.50
Other taxes	38,862.70	2.85	12.96
Total of income from taxes	299,888.1	21.96	100

Source: Ministry of finance, Albania

Table 2: Local and central income 2013-2014

	2013	2014	Change in percentage
Central government	289063	323474	+11.9
Local government	10824.7	12447	+14.98

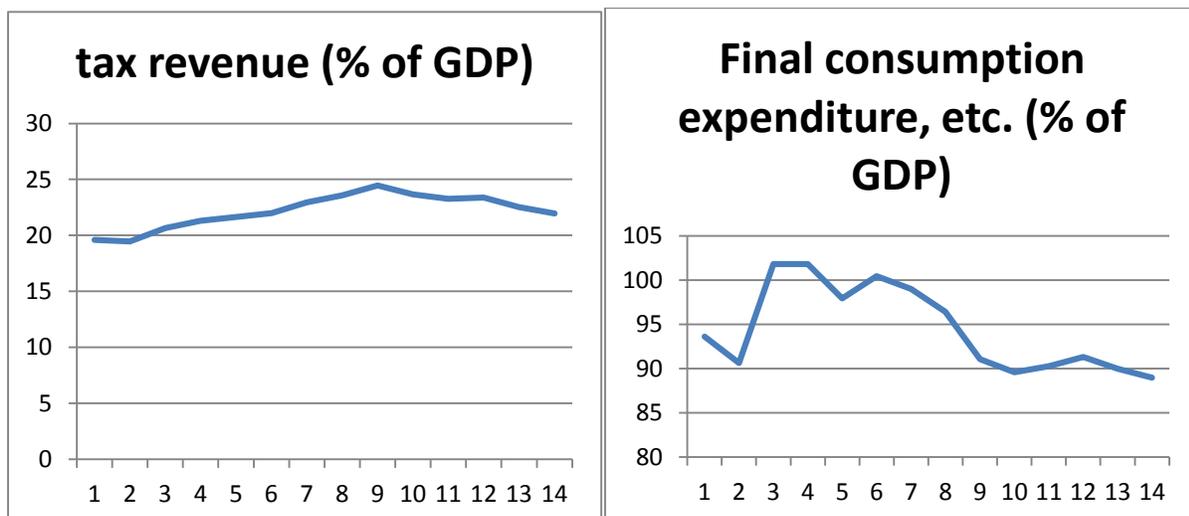
Table 3: Albanian taxation structure for 2014\*

Taxes	In million	% income on taxes
Consumption taxes	170,593	50.78
Income taxes	52,044	15.49
Social contribution and health	69,625	20.73
Other taxes	43659	13
Total of income from taxes	335,921	<b>100</b>

Source: Ministry of finance, Albania

\*Missing value for this year about GDP

Figure 3: The trend of tax revenue and final consumption expenditure (2000-2014)



## FOREIGN DIRECT INVESTMENT AND TAXATION SYSTEMS

Foreign direct investments are considered to be a very important source for the economic development of a country. Foreign direct investments include the individual investments of foreign people and foreign institutions. We deal with foreign direct investments when 10% of the assets of a company belong to a foreign individual or institution. There have been many studies that discuss the impact of tax norms on the foreign direct investments.

Becker, Fuest dhe Hemmelgarn (2006) have studied the effect of the tax reforms on the corporations in 2000, this study was computed by comparing the tax values before and after the reform in Germany. They came to the conclusion that there exists a negative effect of taxes on the investments. Daniel Dreßler (2012) in his study “Five empirical essays on corporate taxation” noticed that it exists a negative relationship between taxation norms and investment volume, in the case of Germany. A 10% increase in the taxation norm gives a decrease of 5.32% on investment.

Barrios, Huizinga, Laeven, Nicodème (2008) used panel data to conduct their study. The data were taken from 33 international companies operating internationally, from 1999-2003. The study was based on 26.567 observed companies. They used OLS and log it regression to analyse the information. Their dependent variable was the host country while the independent ones were taxation norms from the mother country, taxation norms of the host countries, taxation on resources and international taxes. After the study they came to the conclusion that corporate taxation norms in the mother country have a negative effect on the country income, because they are high in norms and this is the reason why the corporation investments go in foreign countries.

## TAXATION SIMULATORS

Taxation simulators are single elements of taxation legislation. They are used to encourage different behaviours. In most of the cases they are instruments used to encourage foreign direct investments and to encourage “international competition” in a country.

During the decision making process to invest in foreign countries companies take in consideration taxation simulators of each country they are discussing (OECD, 2001).

Under developing countries use taxation system as a simulator to attract foreign capital, this would bring to their country economic development. Taxation simulator in most cases are considered as the other side of the coin, as long as this countries do not offer a good infrastructure, have complicated legislation procedures and lots of bureaucracies.

From the conducted studies (Shah, 1995) is noticed that the effect of the simulators in most cases is considered to be doubtful and their costs are very high (for example the existing companies can profit from their “reorganization”).

We should also mention that foreign companies while deciding about the country they will invest take in consideration also other factors like natural sources, economic and politic stability, financial transactions, etc. if this factors are favourable and the taxation system is also favourable then we can say that taxation system impact the foreign direct investment (OECD (1994) It reports that when tax incentives are widely used in Asian countries, the authorities were skeptical about their efficiency if other factors effect on them missing).

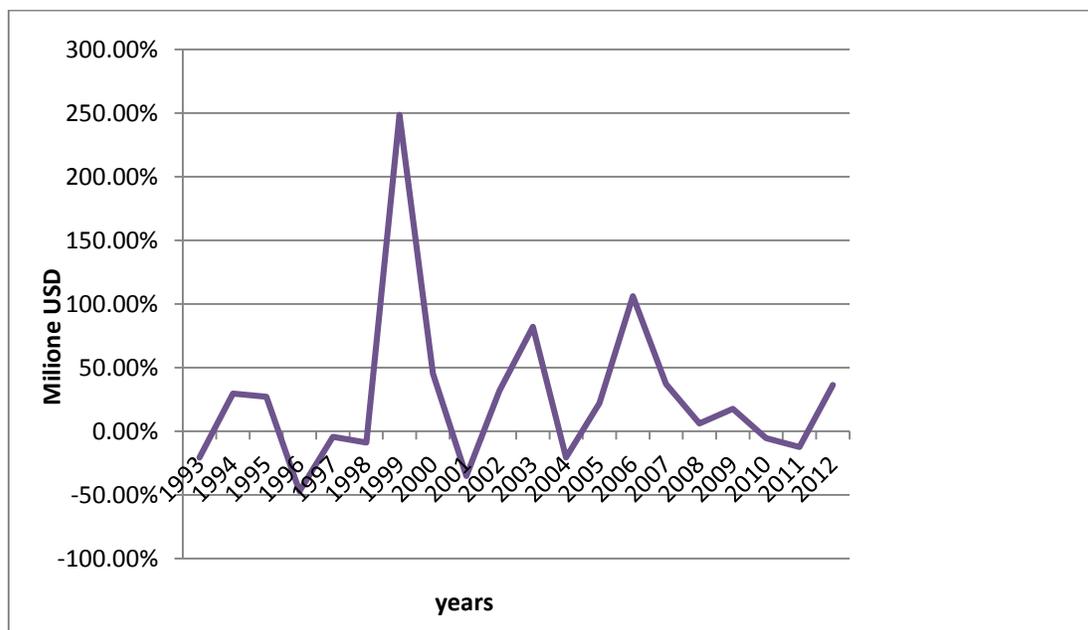
According to the data of World Bank about Albania, the data for IHD, for the period between 1993-2013 are as follows:

Table 4: Foreign direct investment (in million USD) in Albania

Year	Foreign direct investments for Albania	The change in IHD (%)
1993	68.00	
1994	54.00	-20.59%
1995	70.00	29.63%
1996	89.00	27.14%
1997	47.00	-47.19%
1998	45.00	-4.26%
1999	41.00	-8.89%
2000	143.00	248.78%
2001	208.00	45.45%
2002	135.00	-35.10%
2003	178.00	31.85%
2004	324.00	82.02%
2005	257.00	-20.68%
2006	314.00	22.18%
2007	647.00	106.05%
2008	888.00	37.25%
2009	942.00	6.08%
2010	1,109.00	17.73%
2011	1,049.40	-5.37%
2012	920.00	-12.33%
2013	1,253.78	36.28%

Source; World Bank

Figure: The change of IHD in Albania



We can notice that we have a decline in the sum of IHD for the period 2010-2012 which starts to increase in 2012-2013 with an increase of 36.28%.

### CHALLENGES OF OPTIMAL TAXATION SYSTEMS

Most studies on optimal taxation systems are computed using the consumer as a representative. Individuals are very sensitive to economic changes, especial tax changes. Humans are different on the ability of gaining money, and increasing their income. The combination of these characteristics would create a heterogeneous and multidimensional model. This multidimensional model results in differential equation systems, which can be solved only through strong proposals (Mirrlees, 1986; Wilson, 1993, 1995; Tarkiainen dhe Tuomala, 1999; 2007). One of the biggest challenges of this models is to make the differences between groups. Income distribution increases the question of equality; is it right to have the same taxation rate between people that prefer to use luxury product and those that use non luxury ones? (Fleurbaey and Maniquet, 1999). Optimal taxation models face lots of restrictions and proposals. Also there is the problem of time inconsistency of optimal fiscal policy or even political changes of the country, such as may be the case in the time between the entry into force of the fiscal policy and the time when it starts to give effect in production, employment or in price levels, or confidence of people in the political system. So in the design of optimal fiscal policy should be taken too into account the credibility of the individual to the political system (Harvey, 2002).

## REFERENCES

- Atkinson, Anthony B. and Agnar Sandmo, 1980, Welfare implications of the taxation of savings, *Economic Journal* 90, 529-549.
- Browning, Edgar K., 1975, Labor supply distortions of social security, *Southern Economic Journal* 42, 243-252.
- Campbell R. McConnell, Stanley L. Brue, sixteenth edition, 2005, *Economics, Principles, Problems, and Policies*, published by Mc Gray -Hill, pg 223
- Corlett, W.J. and D.C. Hague, 1953, Complementarity and the excess burden of taxation, *Review of Economics Studies* 10, 295-337.
- Feldstein, Martin, "The Welfare Cost of Capital Income Taxation," April 1978 (Part 2). 86. S29-S51.
- Fleurbaey M., F. Maniquet 1999, "Fair allocation with unequal production skills: The solidarity approach to compensation", *Social Choice and Welfare* 16: 569-583.
- Harberger, Arnold C. 1964a. The measurement of waste. *American Economic Review*.
- Harberger, Arnold C. 1964b. Taxation, resource allocation, and welfare. In *The role of direct and indirect taxes in the federal revenue system*, ed. John F. Due. Princeton.
- Harvey S. Rosen, 2002, *public finance*, pg 385
- Jeffrey M. Perloff, 2004, third edition, *Microeconomics*, published by Pearson Addison Wesley, pg 308
- King, Mervyn A., 1983, Welfare analysis of tax reforms using household data, *Journal of Public Economics* 21, 183-214.
- Mirrlees, James A., "An Exploration in the Theory of Optimum Income Taxation." April 1971. 38. 175-208.
- N. Gregory Mankiw, 2009, fifth edition, *Principles of microeconomics*, published by centage learning, pg 127
- Pigou, A. (1920) *The Economics of Welfare*. London: MacMillan
- Ramsey, Frank P. "A Contribution to the Theory of Taxation. March 1927, 37, 47-61.
- Shoven, John B., 1976, The incidence and efficiency effects of taxes on income from capital, *Journal of Political Economy* 84, 1261-1283.
- Stern Nikolas H., "The theory of Optimal Commodity and Income Taxation" 1987, pg 86