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Tax Competition in Switzerland

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Abstract *The main aim of this article is to provide detailed information on tax competition in Switzerland. Generally, tax competition exists when taxpayers can reduce their tax burden by relocating their capital and/or labour from high-tax jurisdictions to low- tax jurisdictions. The paper reviews various scholarly articles by different authors who focus on the topic of tax competition in Switzerland and characterizes different aspects of the Swiss tax system. Before doing that it would be very helpful to give a brief introduction on fiscal constitution in Switzerland.*

Key words Tax competition, cantons, municipality, income tax and corporate tax

JEL Codes: H21, H26, H71

1. Introduction

Switzerland with the population of 8.5 million residents is one of the richest countries in Europe since the late 19th century. The country has the greatest accumulated wealth per capita in the world (Bessard, 2008). The success of Switzerland is partially related to its tax policy. The lower tax rates of the county make it attractive and citizens in nearby countries see Switzerland as a fiscal refuge (Edwards and Mitchell 2008: 97). The decentralized federation structure of the country helps keep tax burdens low, because strong tax competition occurs among the regional governments (cantons) and drive the rates down (Edwards and Mitchell 2008: 97). Switzerland consists of 26 sovereign states (cantons) and each of these cantons have has its own tax system besides to the central government (Bessard, 2008). The cantons are comprised of approximately 3000 municipalities of varying size and population (Schmidheiny, 2006). All these three government levels have very strong elements of direct democracy (Kirchgässner and Pommerehne, 1996).

2. The Swiss tax system

The legitimacy of the Swiss federal government derives from 26 cantons (Bessard, 2008). The cantons arrange and manage their tax systems autonomously. For instance, they determine the level of income and corporate taxes and the degree of tax progression (Schmidheiny, 2006). The cantons have the basic power to tax income, wealth and capital. The local jurisdictions can impose a surcharge on cantonal direct taxes and raise own property taxes. The federal government counts on indirect (proportional) taxes, the VAT and specific consumption taxes such as mineral oil tax. The central government also imposes a small but highly progressive federal income tax (Feld and Kirchgässner, 2001). Federal income tax on income and corporate benefits is shared between the Confederation and the cantons. The cantons receive 30 percent which is partially used for interactional fiscal equalization. Tax base and tax rates of the VAT and federal income tax are specified in the constitution and any change entails constitutional change. The Confederation is not allowed to impose taxes other than those provided for by the constitution (OECD, 2002). The Confederation's ability to levy income taxes and the VAT is regularly reassessed by referenda of which the last one took place in 2004 and applies until 2020 (Bessard 2008: 86-87). In the country tax revenues increased dramatically between 1980 and 1999 particularly those perceived by the Confederation (169%) (OECD 2002: 55). Total tax revenue reached CHF 85.2 billion in 1998 (OECD 2002) and in the Figure 1 the percentage of total tax revenue by level of government can be seen.

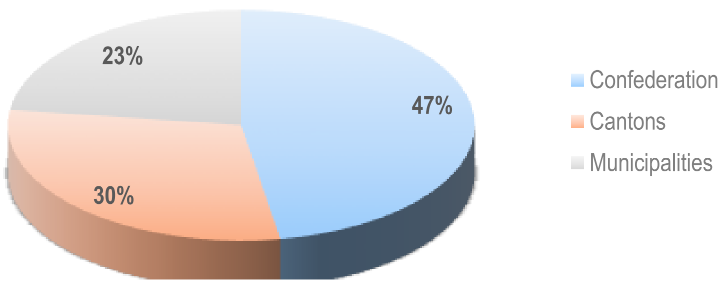

Figure 1. Percentage of total tax revenue by level of government, 1998

Source: Produced by the author based on the calculations of OECD 2002)

Although, federal and cantonal systems of fiscal equalization set restrictions for tax differences across cantons and across municipalities within the same cantons, there are still significant spaces for variation (Schmidheiny, 2006). Therefore, it is not surprising that personal income and corporate taxes vary considerably between the cantons. Fixing the value of the average for Switzerland as 100, the index of the tax burden of personal income and property taxes changed from 56 in the canton of Zug to 154 in Valais in 1990 (Feld and Kirchgässner, 2001). The variations across municipalities within metropolitan areas are also considerable. For example, in the city of Basel income tax rate is 6.3 percent while in the municipalities around the center it is up to 41 percent lower (Schmidheiny, 2006). The small size of the country and subfederal units makes it easy for private and corporate taxpayers to move to places with low tax burdens (Feld and Kirchgässner, 2001). Such behavior by taxpayers creates pressure for all cantons to cut taxes and leads to tax competition.

3. Literature review

Kirchgässner and Pommerehne (1996) contribute to the discussion of question, whether tax competition or centralized harmonization should be chosen in the European Community with the empirical evidence on individual income tax competition in Switzerland. The authors analyse the allocative and distributional properties of Switzerland's federal system. First, they present the main empirical results concerning tax competition in Switzerland and then discuss the allocative and the distributive consequences.

The authors propose a model which is based the share of rich people in the various Swiss cantons. Besides tax rates they consider earning opportunities and the attractiveness of an area in their model which can influence residence decisions. For the former, they included the share of the labour force in industrial production and in the service sector. The attractiveness of the canton was determined by public expenditure per capita and an index of the available stock of infrastructure (ibid: 355-356). The obtained results from the model strongly suggest that, there is at least some tax competition in Switzerland and that some people, particularly high income earners, choose their place of residence depending on the amount of income (and property) taxes that they must pay. Based on those result the authors try to answer the question whether the tax competition has the destructive effects (ibid. 359).

The authors consider the popular hypothesis that saving through lower tax rates is capitalized in higher rents. In other words lower tax rates lead to higher rents and property values. In order to test it the authors estimated a model to explain average rents per square metre in cantons (ibid.: 359). The model shows that there might be some capitalization of tax savings, but it is far from being complete (ibid.: 360). The hypothesis that tax competition could result with a downward competition, leading to low rates and consequently, causing a decline in the share of public expenditures of GNP is reviewed. The authors point out that there was observed a total increase in the share of public spending in Switzerland in the period of the last 40 years (ibid.). Accordingly, tax competition has not created an undersupply of public goods in Switzerland (ibid.: 361)

Concerning the distributive consequences of tax competition in Switzerland the authors analyse income distribution before and after public intervention to estimate its net distributional effects and then compare it with redistribution in other countries. The main result that the authors reach is that the decentralized Swiss federal system does not fail due to fatal distributional consequences. The distributional impact of the public budget is significant and this result holds compared with other Western countries as well (ibid: 365). The comparison among Switzerland, Canada, U.S. and Germany demonstrates that Switzerland has the most equal pre-tax as well as after-tax income distribution.

The authors conclude that although public expenditure as a share of GDP is relatively low, public consumption is not low and there is a distribution on a significant level. The negative consequences of competition related with direct taxes have not occurred. Breakdown of public good supply or redistribution is not also observed. The tax competition is Switzerland has not resulted in disaster and there are good reasons for tax competition and fiscal decentralization in the example of Switzerland, therefore there is no strong arguments to suppose that tax competition should have disastrous effects in the European Union. However, the authors state this result with great caution.

Pommerehne and Weck-Hannemann (1996) conduct an empirical analysis of income tax evasion in 25 Swiss Cantos for selected years based on the standard model of tax evasion. The potential determinants of tax evasion in Switzerland can be various because of strong fiscal decentralization of the country (ibid: 161). The standard hypothesis of income tax evasion assumes that a risk-averse individual in order to maximize his/her expected utility of income conceals either the amount or the share of income. Doing this he/she considers four factors: (a) the probability of detection (b) the penalty tax rate applied when tax evasion has been detected (c) the marginal tax rate (d) the level of true income. All theoretical studies share the similar position that both the probability of detection and the penalty tax rate will negatively affect underreporting of income (ibid: 162). After specifying and obtaining the results of the testable version of model the author extends the analysis (ibid: 162-164). He extends the standard model adding two important factors: inflation and indexation against bracket-creep due to inflation and the degree of cantonal budget control by citizens/taxpayers. Inflation can have an effect on underreporting decision by eroding a given amount of nominal income. Consequently, it can enhance the incentive of taxpayers' to regain purchasing power through additional income concealing. Furthermore, inflation through the bracket-creep effect may affect reporting behaviour (ibid: 165). The effects of government expenditure on tax evasion are also included to the extended model. (Dis) satisfaction with the supply of public goods may influence citizens' (un)willingness to contribute to the financing of government. It can be expected that in the cantons with direct democracies where citizens have strong direct control of government thanks to the existence of obligatory and optional referenda and initiatives, there is less incentive to underreport income tax than in the cantons with representative democracies (ibid: 166).

The results of the both standard suggest that noncompliance is positively related to marginal tax burden and negatively to the probability of audit, through the latter impact is only weak. The likelihood of detection and the penalty tax do not have considerable deterrent effect on income concealing. The extended model shows that noncompliance is positively correlated with inflation. Lastly, the chance of noncompliance falls noticeably when taxpayers have direct control over government budget, otherwise the opposite holds when there is no such control.

4. Income tax and residence decisions

Feld and Kirchgässner (2001) analyse the impact of personal income tax and transfer payments on residence decisions of self- employed taxpayers, retirees and dependent workers in a homogeneity model. The analysis is conducted based on disaggregated data on the Swiss cantons and the largest 137 Swiss cities. The authors give a brief introduction to the Swiss fiscal system before constructing an econometric model. In the paper such introduction about the tax system is already given, so only some point in regard to the Swiss welfare state will be mentioned. The pension system of Switzerland can be divided into three pillars. The first pillar, the AHV/IV is an old age, dependents' and invalidity insurance and is based on the system pay-as-you-go. It provides the primary support of retirees. The second pillar is called the Pensionskasse is also mandatory and is based on fully funded system. It provides retirees to enjoy their usual standard of living. The third pillar is a voluntary private care and ensure living standard higher than the 'usual' one. The pension system can be seen as centralized, however cantons have some autonomy. They can set the amount of supplementary pension benefits according to federal mandates which varied from Sfr 74 in Zug to Sfr 346 in Vaid in 1990 (ibid: 186). Unlike social security, social assistance is totally controlled by local jurisdictions and the cantons. Social assistance per capita differs in the various cantons (between Sfr 72 in Nidwalden and Sfr 960 in Geneva in 1990) and it is financed by both the local jurisdictions and the cantons. With some exceptions it can be claimed that the Swiss system of income redistribution is quite decentralized making it possible to analyse fiscal competition.

The authors present an econometric model which aims to explain the shares of taxpayers in various income classes in the different Swiss cantons as a function of tax rates and public transfers. The cantonal results from the simultaneous equations model suggest that there is fiscal competition between Swiss cantons and particularly the residence decisions of high -income earners depend on the amount of income taxes they are required to pay. In view of the fact that social transfers are basically insignificant, tax competition rather than transfer competition play the main role in cantonal fiscal competition. Furthermore, the income tax rate does not compensate for the impact of public infrastructure which invalidates the hypothesis that both impacts do not differ. Tax competition is stronger for self-employed than for dependent employees and retirees. For retirees the provision of public services plays the major role. Income is redistributed from high to low income taxpayers excluding retirees. High-income earners prefer – ceteris paribus – to reside in a canton with a lower tax burden. The cantonal population is more homogenous in regard to income thanks to the redistributive effects of personal income taxes (ibid.: 204). The authors also provide the results for local tax competition at the level of the largest 127 Swiss cities. On the local level tax competition should be stronger because of weaker mobility restrictions. The analysis shows that the fiscal competition at the Swiss local level is similar to the cantonal level.

The fiscal competition is comprised, largely, of tax competition and slightly less of transfer competition. Additionally, income tax at the local level is also pro-poor because the tax rate of high income taxpayers has a stronger impact than that of low-income taxpayers. The comparison shows that tax competition is stronger at the local than at the cantonal level. The author concludes that there is fiscal competition between Swiss cantons and between Swiss cities; particularly high-income earners' decide the place of residence according to tax rates. The role of social transfers is less. Fiscal competition mainly consists of tax competition rather than transfer competition. The impact of the fiscal competition on three groups is already mentioned above and it holds on both levels. Furthermore, in spite of significant tax competition in Switzerland, decentralized income distribution (except the social security system) has increased between 1977 and 1992 together with the share of redistribution undertaken by taxes. Thus, it can be claimed that the Swiss welfare state has not collapsed due to tax competition.

5. The Swiss corporate tax system

Several words about the Swiss corporate tax system would be useful. Although at the federal level the corporate tax is constant at a rate of 8.5 percent, the corporate tax rate vary considerably between the cantons. Overall, in Switzerland seven different taxes may be levied on capital: the corporate income tax on profits, the capital tax, the federal source tax on interest and dividend income, an emission charge, the property tax, the church tax and in some cantons a minimum tax if revenue from the corporate income tax does not reach certain amount (Feld and Kirchgässner, 2002). The main characteristics of corporate income tax can be specified as:

a) In the majority of cantons, a progressive tax schedule on profits is applied according to the rate of return on capital.

b) Besides, the above mentioned tax, capital is taxed separately by all cantons.

c) The Swiss corporate income tax is a classical one where profits are taxed at the corporate level and again at the shareholder level as dividend income.

Empirical evidence on corporate income tax competition in Switzerland is very limited and the article by Feld and Kirchgässner (2002) contribute to the current literature in this regard. They examine the impact of intercantonal income tax differences on the location of business within Switzerland. The authors suggest the first econometric evidence on the impact of taxes on the regional distribution based on two pooled cross section of the twenty six Swiss cantons for the tax periods 1981/1982 and 1991/1992 and on total cantonal employment based on panel data set of the cantons between 1985 and 1997. Besides taxes they include real wages, public education and public capital spending and some socio-economic-demographic variables as explanatory factors. The purpose is to control for other determinants of business climate at the Swiss cantonal level.

The empirical results of the econometric model suggest that the corporate income tax rate affects the number of highly profitable firms negatively. The constrained estimates for the aggregate of the medium-sized and small firms point out that this impact is particularly strong on the location of medium-sized firms (ibid: 145). In other cases it has no impact. Those firms which were not able to keep their taxable profits low as a result of profit shifting or other kinds tax management are hit by the corporate income tax and have an incentive to relocate (ibid: 146). The analysis of six classes of firms indicates that personal income taxes exert more significant negative influence on the regional distribution of firms. This influence is relatively more important for small than for medium sized firms. This result is consistent with the fact that owners of small firms manage their own business to a larger extent. Thus, this strong impact of personal income taxes verify some piecemeal evidence the role of personal tax rates in Switzerland is more decisive for the location of business that corporate tax rates. The reason behind is that they are essential for the attraction of highly skilled employees. The results of the employment equation shows that the impact of corporate as well as personal income tax on employment in different cantons is considerably away from zero in the fixed cantonal and time effects specification, nevertheless their coefficients are relatively small. The direct effect of personal income taxes on employment is dominating the indirect impact through wages. It can be said that although tax rate differences matter they do not exert major effect on employment (ibid.: 150-151). Corporate and especially personal income taxes have a stronger impact on the cantonal distribution of firms than on employment (ibid.: 152).

Feld and Reulier (2005) provide the empirical analyses of strategic tax setting at the regional level in Switzerland. Due to the fact that individual income taxes of the cantons are highly progressive the authors look at the strategic interdependence between jurisdictions across the different tax brackets. The authors analyse 12 tax brackets and report 11 of them (ibid.: 5). Overall the study covers 26 cantons and the timeframe is between 1984 and 1999. They start the analysis with the investigation into the race to the bottom phenomenon. From a theoretical perspective it is argued that jurisdictions compete with each other by decreasing their income tax rates, consequently, leading to inefficient low tax rates. In other words, tax rates become so low that to finance public services on the required level turns out to be impossible. Thus, decreasing tax rates are taken as evidence for the existence of tax competition (ibid: 6).

In Figure 2, the Swiss cantons are categorized based on their income tax rates on annual taxable incomes of Sfr 500 000. In figure the red cantons have the lowest tax burden (12 -20), the green cantons have tax rates of between 21 and 24 percent, and the yellow cantons have tax rates between 24 and 28 percent. The figure reveals that first, geographical neighbours compete with each other and second, larger geographical areas, the metropolitan centers with their low tax surrounding areas may compete with each other, for instance Geneva with Zurich (ibid. 10-11). The authors conduct an econometric analysis for the cantons which should reflect such a kind of twofold strategic tax competition. The results of the simultaneous equations model with eleven income tax rates using panel data from 1984 to 1999 confirms the hypothesis that strategic interactions between sub -deferal jurisdictions in Switzerland exist. The cantons set income tax rates – ceteris paribus- depending "…on local neighbors'tax rates of the previous period for all taxable income classes and also on regional neighbors' (the neighbors' of the neighbors') tax rates of the previous period for taxable income classes from Sfr 50 000 to less than Sfr 150 000" (ibid: 19). It means that if the neighboring cantons decrease the income taxes, the canton of consideration also diminish its tax rates. The result also shows that tax competition is fiercer for middle income groups among neighbors. Thus, as the residence decision of taxpayers depends on tax conditions, a spatial interdependence of income tax rates provide evidence for the existence of tax competition in Switzerland.

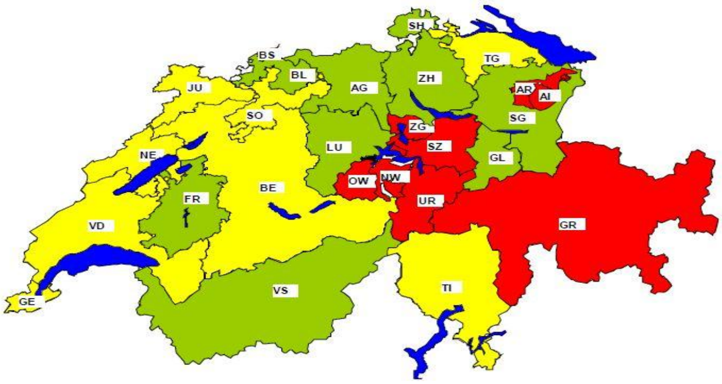

Figure 2: Cantonal and Local Individual Income Tax Rates (in %) on Annual Taxable Income of Sfr 500 000 and More in 1999[1]

Source: Feld and Reulier 2005: 10

Schmidheiny (2005) studies spatial income segregation in the Swiss metropolitan area of Basel. In his paper Schmidheiny (2005) puts forward a research question whether tax differentials across local jurisdictions is not just the consequence, but also the cause of differences in local average income. The author suggests the progressivity of local income tax as a new theoretical explanation for income segregation of the population. He bases the segregation mechanism of the paper on the empirical fact that most income tax schedules are progressive and that the local jurisdiction can often only set the tax level within a given federal tax schedule. The high priority of tax rates in rich households' decisions is related by the progressivity of the tax schedule. For the empirical part, Basel is selected due to the fact that Swiss metropolitan areas are divided into a multitude of municipalities with extensive political and fiscal autonomy and progressive tax schemes which makes them a good example for such study. The Basel metropolitan area is the third largest metropolitan area in Switzerland with 340,000 inhabitants. The city of Basel includes the central business district of the area and the area is consisted of municipalities from three cantons: Basel-Stadt, Basel-Land, and Solothurn. Tax level and tax schedules vary significantly. The tax rates are highest in the city of Basel (6.2 percent) and go down up to 41 percent in the municipalities around the center. The contrast of the local tax rates with the income of the residents demonstrates that the high-tax municipalities are populated by more rich households. The rental prices for houses are also related with the tax rates. The municipalities around the center have higher average prices than the center.

The empirical analysis of the author illustrates that rich households are considerably more likely to change their residence places to the municipalities which set low tax rate than poor households. The progressivity of the local income tax is the basic reason beyond the rich households' higher valuation of low taxes. Nevertheless, rich households choose low-tax municipalities to a greater extent than the tax schedule explains. Alternative explanations are also reviewed in this regard by the author, this impact of taxes holds.

Another factor that affect the households' residence decision is distance from the city center. The rich households mainly prefer the locations away from the center but not far from the first ring of periphery communities. Large households also tend places away from the center than the small ones. In the observed segregation pattern housing prices play little role.

The author identifies social interactions as another major source of income segregation. Overall, households are inclined to the locations where neighbors are alike them: rich households prefer areas with the rich majority; foreigners look for areas with more foreign residents. Rich households (Swiss or foreign) choose places with a low share of foreigners. Such families also try to enroll their children at the school with low percent of foreign pupils, while foreign families with average income tend to find schools with more foreign pupils.

[1]The explanation of the abbreviations in the map: Aargau (AG), Appenzell Ausserrhoden (AR), Appenzell Innerrhoden (AI), Basel-Landschaft (BL), Basel-Stadt (BS), Bern (BE), Fribourg (FR), Geneva (GE), Glarus (GL), Graubuenden (GR), Jura (JU), Luzern (LU), Neuchatel (NE), Nidwalden (NW), Obwalden (OW), St.Gallen (SG), Schaffhausen (SH), Schwyz (SZ), Solothurn (SO), Thurgau (TG), Ticino (TI), Uri (UR), Vaud (VD), Valais (VS), Zug (ZG), Zürich (ZH)

6. Conclusions

Studies by numerous authors suggest that tax competition exists among the Swiss cantons particularly among neighbouring jurisdictions. The tax rates in different Swiss cantons and cities are a significant factor in residence decisions. Especially, people with higher income are more likely to choose the place of residence considering tax rates than lower income ones. On the other hand, the impact of the corporate tax rates on the number of firms in cantons is limited. In other words, personal income tax rates are more crucial for the location of business than corporate tax rates. Setting personal income tax lower, cantons are able to compete better in terms of skilled labour force which is one of the key determinant for attraction of business.

References

Bessard, P. (2008). Tax Competition: The Swiss Case. Liberales Institute.

Edwards, C. and Mitchell, D.J. (2008). Global Tax Revolution. The Rise of Tax Competition and the Battle to Defend it. Washington, D.C.: Cato Institute.

Feld, L.P. and Kirchgässner, G. (2001). Income tax competition at the State and Local Level in Switzerland. Regional Science and Urban Economics, 31, 181-213.

Feld, L. P. and Kirchgässner, G. (2002). The Impact of Corporate and Personal Income Taxes on the Location of Firms and on Employment: Some Panel Evidence for the Swiss Cantons. Journal of Public Economics, 87, 129-155.

Feld L.P. and Reulier, E. (2005). Strategic Tax Competition in Switzerland: Evidence from a Panel of the Swiss Cantons. CESifo Working Paper No. 1516, Category 1: Public Finance.

Kirchgässner, G. and Pommerehne, W.W. (1996). Tax Harmonization and Tax Competition in the European Union: Lessons from Switzerland. Journal of Public Economics, 60, 351-371.

Mitchell, D.J. (2009). The Economics of Tax Competition: Harmonization vs. Liberalization, Briefing Paper. Adam Smith Institute.

Organization for Economic Cooperation and Development (2002), OECD Territorial Reviews. Switzerland, http://www.oecd-ilibrary.org.

Pommerehne, W.W. and Weck-Hannemann, H. (1996). 'Tax Rates, Tax Administration and Income Tax Evasion in Switzerland, Public Choice, 88 (1/2), 161-170.

Schmidheiny, K. (2006). Income Segregation and Local Progressive Taxation: Empirical Evidence from Switzerland. Journal of Public Economics, 90, 429-458.