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**SEMINAR FÜR WIRTSCHAFTS- UND SOZIALPOLITIK  
DER UNIVERSITÄT FREIBURG/SCHWEIZ**

**FISCAL FEDERALISM FOR EMERGING ECONOMIES:  
LESSONS FROM SWITZERLAND?\***

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This paper was prepared for the Sixth Annual Meeting  
of the Latin American and Caribbean Economic Association (LACEA)  
in Montevideo 2001.

**FREIBURG 2001**

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\* The authors would like to thank Peter Beez, Reiner Eichenberger, Georg v. Graevenitz and Bruno Jeitziner for helpful comments.

## 1 INTRODUCTION

There is growing evidence that the organization of the state matters. The effects of fiscal federalism and decentralization are not only discussed with respect to the European Union but also to the emerging economies all over the world (e.g. FUKASAKU/ DE MELLO 1999; TANZI 2001). Wallace E. OATES (1999: 1120) puts it this way:

"In the developing world, we ... see widespread interest in fiscal decentralization with the objective of breaking the grip of central planning that, in the view of many, has failed to bring these nations onto a path of self-sustaining growth."

The key question is: How should the functions of the state be distributed to different levels of government in order to achieve an optimal division of labour? But, in fact, no consensus about the optimal level of decentralization has emerged up to now - neither in theory nor empirically. In particular, there is a lack of econometric research comparing states with different levels of decentralization. Although studies of this kind could help in understanding more about the overall effects of decentralization, the operationalization of federalism remains as the key problem. Consequently, it seems reasonable to analyze the experience of single decentralized countries in order to learn more about the conditions and effects of fiscal federalism. As one of the most decentralized countries worldwide, Switzerland appears to be a natural object for this kind of research.

For a better understanding, we first provide some details about the Swiss fiscal constitution. Switzerland consists of three government levels: the federal level, 26 states (cantons) and nearly 3000 local government units. Nine states count less than 100'000 inhabitants, the smallest canton having only 15'000. Cantons and local jurisdictions are provided with considerable fiscal competences.<sup>1</sup> Thus, almost 75% of the total tax burden on personal and corporate income are cantonal and local taxes. Swiss municipalities can levy a surcharge on cantonal direct taxes and raise their own property taxes. Personal income taxes vary remarkably across and within the states (FELD/ SCHNEIDER 2000). As an example, a family with two children that earns a gross income of CHF 150'000 has to pay CHF 10'095 of cantonal and local taxes in the city of Zug, but CHF 24'255 in Basel. These cities are located in two different

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<sup>1</sup> The swiss constitution explicitly enumerates all the competences of the federal authorities. Cantons and municipalities are provided with a constitutionally guaranteed autonomy in all other issues. Changes of the constitution are difficult as they are submitted to a referendum (amongst other).

cantons and within a distance of 125 kilometres (SWISS FEDERAL TAX ADMINISTRATION 2000). The federal government relies mainly on indirect (proportional) taxes, specific consumption taxes, a general sales tax and small but highly progressive income taxes. Differences between jurisdictions are smoothed by federal, intercantonal and intracantonal grants and transfers. The contributions to this mechanism are determined by the financial power of each state.

As the above facts indicate, the Swiss fiscal system is thoroughly decentralized. In the last ten years this has led many scholars to analyze the economic effects of tax competition in Switzerland (BLÖCHLIGER/ FREY 1992; FREY/ BOHNET 1993; EICHENBERGER 1994; KIRCHGÄSSNER/ POMMEREHNE 1996; POMMEREHNE/ KIRCHGÄSSNER/ FELD 1996; FELD 2000). According to the literature, there is considerable empirical evidence for generally positive effects of fiscal federalism in Switzerland. Building on this, scholars have recently started to study the institutional preconditions for this system. They stress the fact that fiscal federalism does not necessarily work under all circumstances - institutions matter (WOHLGEMUTH/ ADAMOVICH 1999; FELD/ SCHNEIDER 2000; EICHENBERGER/ HOSP 2001). Naturally, this leads us to the question: Can the Swiss experience be a model for political strategies in the emerging economies in Latin America and other regions of the world?<sup>2</sup> Or is the institutional framework in Switzerland so singular, that the Swiss experience is of no use for political strategies in other countries?

In this paper we will proceed as follows. Part 2 briefly presents the theoretical arguments for and against fiscal federalism from an economic point of view and explains the difference between competitive and coordinated federalism. The theoretical arguments are then confronted with empirical evidence from Switzerland (Part 3). In a second step, an attempt is made to identify specific institutions conducive to the functioning of fiscal federalism in Switzerland. Part 4 deals with the applicability of the Swiss experience for emerging economies in Latin America. The analysis first recognizes that most formal and informal institutions identified to be crucial for the functioning of Swiss fiscal federalism are not given in Latin America. It then examines a group of challenges for fiscal federalism in emerging economies (internal market, informal economy, important differences in regional income and corruption). This leads to the policy conclusions in part 5: fiscal federalism can only

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<sup>2</sup> Linked to this statement is the idea that decentralization may be similar to a superior good, which becomes more demanded when income increases. The causality seems to go the opposite way in countries which started as federations like the USA or Switzerland.

produce its positive effects under certain institutional circumstances. These circumstances are often not considered when introducing tax competition.

## 2 THEORETICAL BACKGROUND

Proponents of fiscal federalism argue that tax competition corresponds to the idea of fiscal equivalence, gives local politicians more responsibility and leads them to manage their budget more carefully and according to the preferences of their constituents. Sceptics on the other hand fear a race-to-the-bottom and an inefficient production of public goods (section 2.1). In order to be able to offer an analytical guideline for the assessment of federal institutions in section 2.2 we distinguish between different kinds of fiscal federalism.

### 2.1 The Economic Theory of Federalism Revisited

From an economic point of view federalism is defined as a system where jurisdictions within a state have a considerable amount of tax autonomy.<sup>3</sup> This chapter very briefly deals with the most important theoretical arguments for and against fiscal federalism. As the arguments are widely known, we will just present the key elements.

The traditional economic theory of fiscal federalism is concerned with the provision of public services at the adequate level of government and the assignment of the proper fiscal instruments (overviews are provided by OATES 1972 and 1999). Demand for public services varies across (and within) jurisdictions. Decentralization provides incentives and possibilities for governments to generate better knowledge about the preferences of the people because they are closer to them. And, people are closer to governments and can thus better control the activities of politicians and bureaucrats (FREY/ BOHNET 1993). According to a more recent body of literature the *positive effects* of fiscal federalism are linked to the idea of a properly functioning interjurisdictional competition. This can be summarized as follows:

- In a federally organized state citizens and capital have better possibilities for "exit" from a jurisdiction than in centralist states. Consequently, local governments are forced to be more aware of the preferences of citizens and enterprises, if they want to prevent them from moving to other jurisdictions which offer better packages of taxes and public services. Some authors claim that

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<sup>3</sup> The economic theory of federalism goes back to the famous article by TIEBOUT (1956). For a concept of federalism more focused on direct democracy see FREY/ EICHENBERGER (1999).

this effect would be reinforced, if citizens in a jurisdiction have the right to decide about the tax burden themselves, e.g. in procedures of direct democracy (WOHLGEMUTH/ ADAMOVICH 1999; EICHENBERGER/ HOSP 2001).

- The higher intensity of interjurisdictional competition in federally organized states is said to produce incentives for innovations in the political sphere. The idea is, that innovations can (and will) be tested in jurisdictions where there is demand from the constituents and where the conditions are favourable. Innovations which follow a "bottom-up" pattern are expected to be cheaper and more successful than experiments imposed "top-down" (EICHENBERGER/ HOSP 2001). This argument is based on HAYEK's (1978b) idea of "competition as a discovery procedure".

BRENNAN/ BUCHANAN (1980: 185) put up the hypothesis that the overall size of the public sector "should be smaller, ceteris paribus, the greater the extent to which taxes and expenditures are decentralized." Nevertheless, as studies by OATES (1985 and 1989) and GROSSMAN (1989) show, there seems to be no clear evidence for this claim. STEIN (1999) even observes for Latin America that decentralized governments tend to be larger. As he points out, one interpretation can be that citizens are more satisfied in smaller units and therefore demand more public services (STEIN 1999: 386ff.).

As to the broader relationship between fiscal federalism and economic performance there is not much empirical evidence. However, a World Bank study (HUTHER/ SHAH 1996) finds a statistically significant and positive correlation between fiscal federalism and political governance quality in most cases. Of course, this does not tell us anything about the direction in which the influence goes - fiscal decentralization could also be something like a luxury good.<sup>4</sup>

The *sceptical view* of fiscal federalism can be summarized in three main arguments:

- Due to the low cost of mobility between the jurisdictions of a federal state, citizens and capital move to places with low taxes. According to critics of fiscal federalism, this generates a "race-to-the-bottom" as governments are forced to continuously lower taxes until public spending cannot be financed any more. In theory this would lead to a complete breakdown of public services. Closely linked to this scenario is the idea that fiscal federalism impedes redistribution as people with higher income tend to avoid taxes and move to other jurisdictions with lower taxation (SINN 1990 and 1997).

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<sup>4</sup> For an overview of other empirical studies which go in the same direction as HUTHER/ SHAH (1996) see OATES (1999).

- Fiscal federalism is often advocated for ethnically and geographically divided societies. Sceptics fear, that this would lead to increasing claims for more autonomy endangering the unity of the federal state. Apart from that the division into lower jurisdictions is expected to produce new minority problems. Thus, fiscal decentralization is said to be not only inefficient but even dangerous.
- Sceptics of the idea of fiscal federalism argue that smaller jurisdictions cannot take advantage of economies of scale. A different version of this critique claims that smaller fiscal units are too small to be able to survive economically.

We could not find empirical studies which would prove the theoretical arguments of the sceptics of fiscal federalism. Moreover, as Part 3 will show, the example of Switzerland seems to empirically contradict the critics.

## 2.2 Competitive versus Coordinated Federalism

In the literature, multiple approaches for differentiating between alternative kinds of federalism can be found. Scholars like INMAN/ RUBINFELD (1997) or QIAN/ WEINGAST (1998) for example evaluate different forms of federalism in terms of their impact on economic efficiency, distribution of income, political participation and protection of individual rights and liberties. For our purpose we contrast competitive with coordinated federalism.

The notion of *competitive federalism* not only contains an aspect of mobile production factors in the sense of TIEBOUT (1956), but is also concerned with competition as a constraint for political actors. First of all, it is characterized by the autonomy over taxes and public services. This primary authority of subnational governments should be combined with hard budget constraints. According to the literature on market-preserving-federalism, hard budget constraints mean that lower levels of government are unable to create and to borrow money unlimitedly. Furthermore, central government is not willing to bail out troubled lower-level governments (QIAN/ ROLAND 1996, QIAN/ WEINGAST 1997). Within a competitive environment subnational governments will be punished if they underperform in comparison to other jurisdictions. Mobile resources will choose the "exit" option. QIAN/ ROLAND (1996) even state that interjurisdictional competition leads to the endogenous emergence of harder budget constraints. Finally, competitive federalism can only persist, if the central state does not have the competences to centralize taxes and public services (BLANKART 2000). That means that centralization is only possible, if all the lower jurisdictions unanimously decide to concede the power to tax to the federal

authorities. This makes attempts of cartelization to avoid competition very difficult and can be conceived of as a credible commitment by the states to preserve federalism.

The main argument for *coordinated federalism* is the adjustment of differences between jurisdictions. But, as compared to competitive federalism, coordinated federalism is characterized by a higher level of harmonization within the federation. Coordinating and bargaining are the driving principles of this kind of federalism. If lower-level governments are not able to prevent other jurisdictions from free riding or to enforce agreements, they will try to push competences to the federal government. BLANKART (2000: 37) calls this process an attempt to build up a cartel on tax rates. Intergovernmental tax sharing rules are signs for such cartels. In this context, soft budget constraints are more probable. Since subnational governments are not completely responsible for their financial situation, federal governments have the duty to help troubled governments. From this point of view, coordinated federalism does not seem to be a sustainable institutional arrangement.

Table 1 summarizes the most important differences between competitive and coordinated federalism.

TABLE 1: Competitive versus Coordinated Federalism

	<b>Competitive federalism</b>	<b>Coordinated federalism</b>
<b>Harmonization of tax bases and rates</b>	Low	High
<b>Harmonization of public services</b>	Low	High
<b>Budget constraint for lower jurisdictions</b>	Hard	Soft
<b>Tendency for centralization</b>	Low	High

Obviously, our sympathy is with competitive federalism. Nevertheless we have to stress that these two concepts of federalism describe two points on a continuum where one extreme would be complete desintegration of the federation and the other complete centralization. For the analysis of federalism the important question is, which principle, competition or coordination, should be the driving force of the system.

### 3 FISCAL FEDERALISM IN SWITZERLAND

According to a considerable number of empirical studies tax competition in Switzerland has positive effects overall (3.1). Nevertheless it seems that the Swiss federal system is based upon very specific institutional preconditions - e.g. state and

local tax assignment, direct democratic elements, intergovernmental grants and revenue sharing but also informal institutions (3.2).

### 3.1 Competitive fiscal federalism in Switzerland

In spite of the marked federal structure Swiss internal markets allow the free movement of capital, labour, goods and services - not only in theory but (largely) also in reality. Important conditions for functioning markets, e.g. common civil and criminal laws, a common currency or a universal infrastructure are provided. As geographical distances are relatively small, the costs of mobility are a minor factor obstructing the movement between jurisdictions. However, the mobility of labour may be hindered by cultural barriers as Switzerland consists of three regions differing in language and culture. In sum, as already remarked above, Switzerland bears the potential for a very intense interjurisdictional competition.

Of course it is difficult to empirically prove the *positive effects* of fiscal federalism enumerated in previous sections. Nevertheless, according to BLÖCHLIGER/ FREY (1992) and KIRCHGÄSSNER/ POMMEREHNE (1994 and 1996), in Switzerland the incentive mechanisms work as predicted by the theory: competition generates better information and incentives for politicians to produce public goods not only in better accordance to the preferences of the voters but also in a more efficient way.<sup>5</sup> It is possible, that this is an important reason why Switzerland still has the lowest government size in Europe (38,5% general government expenditures of GDP) after Ireland (31,5%) - in spite of a strong growth of total government expenditures in the nineties (SWISS FEDERAL TAX ADMINISTRATION 2001).

An interesting feature of the Swiss fiscal system is that it largely corresponds to the guidelines proposed by MUSGRAVE (1983) sketching an optimal distribution of taxation between federal, state and local levels. According to MUSGRAVE, the provision of public goods should be decentralized as far as possible while redistribution policies should stay with the central authorities. With reference to taxes, federal authorities should rely on a highly progressive income tax for redistributive reasons and on a consumption tax if lower jurisdictions are small. Federal subunits (states, cantons) should levy income and consumption taxes (if the units are large enough) and also a natural resource tax. Finally, according to MUSGRAVE, municipalities should raise property taxes. Except for minor aspects in income and corporate taxes Switzerland corresponds to the Musgravian model (FELD/

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<sup>5</sup> Here, direct democracy seems to be an important factor. See section 3.2.



SCHNEIDER 2000). Table 2 shows this in detail. Thus, the only important difference seems to be that municipalities can impose a surcharge on the cantonal individual and corporate income taxes. But, in fact, this is an important difference as it is conducive to (or even necessary for) interjurisdictional competition. Another interesting point to note here is that the Swiss fiscal system is not the outcome of a grand design of some mastermind but has evolved in the vertical and horizontal competition between the different jurisdictions.

TABLE 2: Tax assignment (FELD/SCHNEIDER 2000).

	<b>Guidelines by MUSGRAVE (1983)</b>	<b>Swiss fiscal system</b>
<b>Federal authorities</b>	Progressive income tax, consumption tax (if lower jurisdictions are small),	Progressive income tax, consumption tax (lower jurisdictions are small), corporate income tax
<b>States/ Cantons</b>	Residents' income tax	Personal and corporate income tax, inheritance tax, wealth tax
<b>Local authorities</b>	Property taxes, payroll taxes	Personal und corporate income tax surcharge, property tax

It is easier to deal with the expected *negative effects* of fiscal federalism, as the Swiss experience proves to be an empirical contradiction to all of them. First of all, there is a variety of studies which prove that the "race-to-the-bottom" hypothesis is not valid for Switzerland:

- For Switzerland, it is true that tax burden matters for migration decisions of individuals with a relatively high income (above CHF 100.000). FELD (1997 and 2000) finds that persons with higher income look at taxes and infrastructure only and not at redistribution. On the other hand, individuals with lower income do take redistribution into account when they migrate to another canton.
- According to FELD (2000: 134ff.), it seems that there is something like a migrational equilibrium in Switzerland. In his analysis for the years 1989 and 1990 he finds that there was almost no migration between the cantons.<sup>6</sup> However, the share of persons with a taxable income of more than 100000 CHF was of 9,41% in the canton of Zug and of 2,53 in the canton of Jura (average: 5,47%), Zug having the lowest tax burden, Jura the highest (FELD 1997). Geneva on the other hand proves that taxes are not the only explanatory variable for the geographical distribution of individuals with high income: the percentage of

<sup>6</sup> For example, from the canton of Zurich there was a net emigration of only 0,3%.

people with high taxable income is important in Geneva although it has a relatively high tax burden.

- Tax competition in Switzerland has not lead to a convergence of the tax burden in the different cantons. Taking the overall tax burden as a benchmark (index: 100) the average deviation for the 26 cantons was of 13,5 points in 1985, 14,8 in 1990 and 15,3 in 1996. Also, the spread between the cantons with the highest and the lowest tax burden remained more or less unchanged: in 1985 it was 134 index points for the highest and 67 for the lowest tax burden - 1990: 146 and 58; 1996: 136 and 55 (WOHLGEMUTH/ ADAMOVICH 1999).<sup>7</sup>
- The swiss welfare state has not collapsed. An important share of the redistribution takes place on the cantonal and municipal level (KIRCHGÄSSNER/ POMMEREHNE 1996; FELD/ SCHNEIDER 2000).<sup>8</sup> In fact, the proportion of transfers and subsidies in relation to Swiss GDP has significantly grown since the eighties: 1980 13,4% of the GDP were redistributed, 1990: 16% and 1995: 18,3% (GWARTNEY/ LAWSON 1997: 178). Critics speak of an "explosion" of the Swiss welfare state.

The other two arguments - "federalism has disintegrating consequences" and "federal subunits are too small" - can also be dismissed for the Swiss case. As to the first argument, the Swiss federation has been a very successful example for the peaceful coexistence of four different cultures for at least 150 years (since the constitution of 1848). In addition EICHENBERGER/ HOSP (2001) claim that a successful federal system does not only build on ethnically different regions but also on the more intense competition between jurisdictions with more similar cultural backgrounds. They argue that the strengths of the Swiss federal system stem from the very fact that there is an especially intense competition between the cantons of the same language and culture.

The second argument stating that federal subunits are too small to be efficient is only valid if the jurisdictions do not have the incentives to cooperate on issues concerning more than one federal subunit. These incentives are mainly linked to economic openness and fiscal autonomy of jurisdictions. Finally, the economic success of small

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<sup>7</sup> The canton of Zug has been pursuing a radical strategy of low taxes since the mid 1960s. Up to now no other canton has felt obliged to do the same. Zug has been the canton with the lowest taxes since then.

<sup>8</sup> The same phenomenon can be observed in the USA.

cantons (and even municipalities) clearly contradicts the argument that small units cannot survive economically.<sup>9</sup>

In general, the Swiss experience seems to provide some evidence in favour of the claimed positive effects of fiscal or competitive federalism. At the same time the negative effects can be mitigated or even averted. In any case it can be regarded as proven that an at least potentially intense interjurisdictional (tax) competition does not necessarily lead to the collapse of the welfare system or the ability of the state to provide the basic public services.<sup>10</sup>

### 3.2 Institutions Matter

If, as we have seen in the preceding section, fiscal federalism works in Switzerland: does this automatically mean that it works everywhere else? Or is the institutional framework in Switzerland so unique that the Swiss experience cannot be taken as an example for other countries or regions in the world? To be able to deal with these questions, formal and informal institutions in Switzerland considered to be conducive to the functioning of fiscal federalism have to be analyzed. We have picked out four institutions which seem to have especially positive effects in this respect:

- a system of intergovernmental redistribution;
- a compensation mechanism for transfers paid to immigrants from other cantons;
- extensive elements of direct democracy giving citizens rights of participation in local decisionmaking;
- "loyalty" as a consequence of specific investments.

As we have emphasized above, competition should be the key characteristic of federalism. Nevertheless, a functioning system of *intergovernmental redistribution* is important as it works as an insurance against harmful social political disruptions. But it should be carefully designed not to operate against competition. Furthermore, fiscal spillovers can be reduced. In Switzerland, economic disparities between the cantons and municipalities are adjusted through such a system of intergovernmental redistribution. First, the federal income tax has redistributive effects as it is designed as a strongly progressive tax. It thus compensates the low progression of some of the cantonal income taxes. Second, the federal government redistributes some of its tax

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<sup>9</sup> Here, a clear case in point also are very small and economically very successful countries like Luxemburg and Liechtenstein.

<sup>10</sup> Other federally organized states as the USA, Canada, Australia or Germany show similar tendencies. Nevertheless, Switzerland can be judged as an extreme example, as fiscal federalism is especially marked.

income between the cantons according to an index of the financial power of the 26 cantons. The index is composed by the four variables GDP per capita, tax income, tax burden and the share of mountainous areas in the canton (SWISS FEDERAL TAX ADMINISTRATION 2000). As in addition there is also intercantonal redistribution, the system is perceived to be complicated and intransparent and is currently under reform. The idea is to establish a new assignment of functions, to strengthen the mechanism of unconditioned transfers and to avoid incentives for the states to report their financial power incorrectly. Third and finally, the cantons themselves manage the redistribution between their municipalities based on their financial power.

An important element of the race-to-the-bottom hypothesis is the idea, that individuals move to places where they receive more transfers. In Switzerland a special *mechanism for compensating transfers to immigrants from other cantons* works against these effects: transfers to individuals who have recently moved to another jurisdiction are paid by their jurisdiction of origin for a certain time. For example, social welfare assistance is paid by the canton of origin for two years. After that the costs are split half between the canton of origin and of residence over the next eight years (FELD 2000: 133). Another example can be found in the education system: university cantons receive between CHF 9.000,- and 46.000,- per year and student from the canton where students finished school (EICHENBERGER/ HOSP 2001).

Switzerland is well known for its particular political system consisting of a representative democracy combined with extensive *direct democratic* rights for the citizens.<sup>11</sup> Nine cantons decide on their tax rates in parliament, the other 17 decide on the tax rates in a referendum. Thus voters have influence on the tax burden (FELD 1997: 465). A whole group of authors say that direct democracy has stabilizing effects on fiscal federalism.<sup>12</sup> First, according to FELD (1997: 471f.), direct democracy is an econometrically significant variable in explaining why high income individuals do not move away from cantons with a higher tax burden. Second, VAUBEL (1995), WOHLGEMUTH/ ADAMOVICH (1999) and EICHENBERGER/ HOSP (2001) claim that direct democracy works against the natural tendency of a centralization of fiscal

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<sup>11</sup> Direct democratic rights on the federal level are: obligatory referenda for changes in the constitution, facultative referenda for certain issues (e.g. foreign policy) and popular initiatives where 100.000 voters can demand constitutional changes. Every canton has its own constitution with its particular set of direct democratic rights. Even municipalities in the same canton can differ in their direct democratic rights.

<sup>12</sup> Another institution counteracting centralization are "sunset laws" concerning the competence of the federal authorities for certain issues. Thus, for example, the existence of the federal value added tax and the federal income tax has to be periodically confirmed by a popular referendum.

competences in federal states.<sup>13</sup> Thus, for example, unlike Germany, Switzerland has not experienced a "crawling" centralization and harmonization in the decades after World War II (KIRCHGÄSSNER/ POMMEREHNE 1994: 156ff.). Other studies show similar effects for the USA (e.g. MATSUSAKA 1995). Third and finally direct democracy is said to have a mitigating effect on the absolute level of state activity: POMMEREHNE/ SCHNEIDER (1982) note that government size in swiss cantons with direct democratically controlled taxes is significantly smaller than in the remaining cantons and FELD/ KIRCHGÄSSNER (1997) observe lower debts in jurisdictions with elements of direct democracy in their constitutions.

Competition between jurisdictions in Switzerland can be perceived as a function of the possibilities of "exit" (fiscal federalism) and "voice" (direct democracy). According to HIRSCHMAN (1970: 77) a "more solid understanding of the conditions favouring coexistence of exit and voice is gained by introducing the concept of *loyalty*."<sup>14</sup> Loyalty understood as the consequence of a mixture of specific investments in social networks, reputation and cultural factors (e.g. language) is an important barrier to exit and thus counteracts tendencies towards a race-to-the-bottom. Apart from that it is conceivable that loyalty has positive effects on the willingness of the better off to pay transfers in smaller jurisdictional units. WOHLGEMUTH/ ADAMOVICH (1999) argue, that federal systems as well as direct democracy are conducive to loyalty because the preferences of the voters matter more. And this makes citizens more aware of and more responsible for local issues. If this is so, (fiscal) federalism and loyalty mutually reinforce each other in a virtuous circle.<sup>15</sup>

Of course, Switzerland is no "utopia". But, in sum, the country seems to have produced an interesting institutional setting combining elements of exit, voice and loyalty conducive to interjurisdictional competition. According to standard indicators (e.g. per capita income) and in the sense of comparative institutional analysis (FREY 1990) it can be regarded as a long term success story, even compared to its European neighbours. Naturally, this does *not* mean that a simple export of the Swiss system of fiscal federalism will necessarily have the same positive effects in other countries. A careful analysis of the institutional setting has to be undertaken. The next part will make some first steps into this direction.

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<sup>13</sup> For the natural tendency towards centralization see FREY/ EICHENBERGER (1996) and EICHENBERGER (2000). BLANKART (1998) proves this tendency for Germany between 1949 and the 1990s.

<sup>14</sup> Emphasized by the author (see also Chapter 7 in HIRSCHMAN 1970). In the terminology of NORTH (1991), "loyalty" is an informal institution as opposed to the formal laws we have treated up to now.

<sup>15</sup> FREY/STUTZER (2000) have even found for Switzerland, that federalism and direct democracy improve the happiness of people.

## **4 FISCAL FEDERALISM IN LATIN AMERICA?**

Many countries in Latin America like Argentina, Brazil, Colombia, Bolivia, Mexico and Venezuela are decentralizing and increasing democratic rights and responsibilities in the provision of public services. For example AGHÓN (1997) and STEIN (1999) stress a trend towards decentralization. Between 1985 and 1995 the degree of decentralization in public expenditures has increased by 4 percent in 14 Latin American countries. However, in comparison to the OECD countries, Latin America is highly centralized: In 1995 less than 15 percent of total government expenditures were executed by subnational governments, on average, in Latin America. The corresponding figure in industrialized countries is over 35 percent.<sup>16</sup> Only Argentina, Brazil and Colombia exceed the OECD average. But, of course, the mere degree of decentralization does not tell us anything about the quality of the institutional setting and the intensity of interjurisdictional competition.

To be able to see whether the Swiss experience bears lessons for the design of fiscal federalism in emerging economies in Latin America we examine whether the formal and informal institutions identified in section 3.2 are given in Latin American countries or not. Because of their importance in the region we take a closer look at Brazil and Argentina (4.1). In a second step we examine a group of typical institutional arrangements in emerging economies (e.g. important differences in regional income, informal economy, corruption) as to their effects on fiscal federalism (4.2).

### **4.1 Coordinated fiscal federalism in Latin America**

The institutions dealt with in part 3.2 mainly have one effect: to dampen the negative effects of tax competition without abolishing the competition between jurisdictions. As set out in section 2.1, tax competition produces constraints for politicians, that result in a better package of taxes and public services. And it is expected to create incentives and better possibilities for innovation in the political sphere. Scholars like MUSGRAVE (1997) and others emphasize the role of cooperation and coordination in a federal system in order to avoid the supposed "race-to-the-bottom". It seems that the federal systems in the more decentralized countries of Latin America have been designed along these lines. REZK (2000: 4) for example emphasizes that in Argentina the aspect of coordination has prevailed over the idea of interjurisdictional competition:

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<sup>16</sup> The figures mentioned in this part are based on STEIN (1999).

"Revenue sharing was the preferred method of tax coordination in the country, coparticipation becoming 'the' intergovernmental fiscal arrangement, whereby national and subnational levels sought to avoid tax competition among jurisdictions".

VARSAÑO (2001) describes the most prominent case of tax competition in Latin America, the state value-added tax in Brazil (ICMS) as a "fiscal war". This bad connotation underlines apparently existing reservations against tax competition.<sup>17</sup> VARSAÑO even notes: "Virtually all recent work on tax competition in federations conclude that the last-named practice is pernicious."

In any case, the literature on federalism in Latin America seems to mainly focus on the idea of federalism as some kind of cooperative or coordinated decentralization.<sup>18</sup> Consequently, *inter- and intragovernmental redistribution* is perceived to be the crucial instrument for making federalism work. Generally, transfers can be allocated by discretion or legal requirements. As STEIN (1999: 373) reports, a third of the transfers in Latin America are discretionary. According to INMAN/RUBINFELD (1997) and STEIN (1999), discretion and negotiation raise serious problems in comparison to a rule-based approach.<sup>19</sup> For example, they doubt that interjurisdictional Coasian bargains are effective and describe the negative incentives for federal subunits. If programs of lower jurisdictions are not solely financed with their revenues, there is a tendency to overexpand the budget and to require more transfers from the common pool - this is the well known tragedy of the commons. Finally, discretionary redistribution bears a high potential for political and not economic considerations in governmental decisions on revenues. This means that political bargaining skills of local politicians become more important than management skills.

In spite of Argentina normally being perceived as a rule-based federal state, SAIEGH/TOMMASI (1998) provide a list of important criticisms regarding the tax-sharing agreement. The problems here are very similar to the problems of discretionary regimes. Amongst others, SAIEGH/TOMMASI criticize the existence of a bailout problem, induced inefficiencies in the aggregate fiscal mix, a lack of incentives for federal subunits to produce information and the high complexity of the system. According to the authors, political instability and institutional rigidities are the main

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<sup>17</sup> The more relevant question seems to be, if value-added taxes are an adequate vehicle for tax competition.

<sup>18</sup> INMAN/RUBINFELD (1997) distinguish between "cooperative" and "democratic" federalism. As opposed to cooperative federalism, in the democratic version decisions are taken by the majority and not unanimously. This article does not make this difference and only uses the term cooperative federalism.

<sup>19</sup> TOMMASI/SAIEGH/SANGUINETTI (2001) provide a political-transactions theory, which shows the trade off between rigid rules and discretionary responses.

reasons for the inefficiency of Argentina's intergovernmental redistribution. Politically, the Argentinean tax-sharing agreement can be interpreted as a veto-game, because the laws require ratification by provincial legislatures (SAIEGH/TOMMASI 1998: 9). Also in Brazil a considerable share of transfers is constitutionally-mandated, but there are some discretionary and negotiated transfers too. This makes the Brazilian system especially complicated and intransparent. In any case, (AFONSO/ DE MELLO (2000: 21) call for more (and not less) coordinated federalism to avoid financing shortfalls at the subnational level.

Another issue frequently discussed in the literature is the way intergovernmental grants and transfers should be determined. Thus it is expected that an unconditioned redistribution allows the authorities in federal subunits to spend the financial means according to the preferences of the people; provided the political control of the authorities works.<sup>20</sup> Although transfers in Argentina and Brazil are mostly unconditional, a mixed system of delegation, earmarked grants and revenues, forced and unforced coparticipation has helped to build a fiscal "labyrinth" with mutual dependencies (SAIEGH/TOMMASI 1998: 8). The example of Brazil shows possible harmful effects of the earmarking of sharable revenues at the federal level. There, the federal state has to share the revenues of the income tax and the federal value-added tax with the lower jurisdictions. This has led to an increase of the enterprise payroll and earnings taxes which are not earmarked for sharing with distortionary effects in the labor market and for the international competitiveness of the country (AFONSO/DE MELLO 2000: 7).

In Latin America, the aim of the interjurisdictional redistribution is to produce a system of coordinated federalism. Because of this, redistribution produces wrong incentives and leads to a severe common pool problem and bail out scenarios. As opposed to this, the Swiss federal system is focused more on the idea of competition and of fiscal equivalence: grants and transfers are understood as means to equalize the financial power of federal subunits without abolishing the benefits of competition. In this context, the current tax-revenue sharing design in Switzerland is regarded as being far from perfect, but the actual reforms are expected to take a further step into encouraging fiscal discipline and responsibility.

To our knowledge the Swiss *mechanism for compensating transfers to immigrants from other federal subunits* is not matched by any comparable institution in Latin America. Above all, this seems to be a question of institutional innovation. A reason for these

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<sup>20</sup> For a different point of view see MUSGRAVE (1997).



innovations not happening could either be a lack of knowledge or (more probably) a question of political enforceability (technically speaking: of a politico-economical equilibrium). Other institutions like competitive federalism or direct-democratic elements could help to improve the ability for innovation. On the other hand, a mechanism like the above can only operate under certain administrative preconditions (registration of citizens, legal possibilities for persecution, etc.).

Another institution supporting the functioning of fiscal federalism we have dealt with in section 3.2 is *direct democracy*. Since 1848 Switzerland has experienced 466 referenda and initiatives at the federal level - not counting the innumerable plebiscites at the cantonal and local level. The first reported referendum in Latin America was held on the provisional constitution in 1812 in Chile. Since then 87 popular votes were counted in the whole of Latin America, mainly at the federal level (see in the internet: [c2d.unige.ch](http://c2d.unige.ch)). Recently, first signs for the introduction of more direct democracy in Latin America can be noticed: the Province of Buenos Aires established forms of direct democracy in 1994 (PORTO/ PORTO 2000: 157). Direct democracy is said to give the politicians incentives for credible commitment to policies. Especially at the subnational levels it is supposed to lead to a better control of the officials. It could be argued that as direct democracy has a long tradition in Switzerland, the Swiss experience cannot be taken as an example for other societies. But: every tradition has a starting point. Although this form of democracy does not have much tradition in Latin America, citizens seem to have learned to deal with it where it was introduced. However, people in Latin America learn to use their democratic rights: PORTO/ PORTO (2000) report that voters in municipal elections in Argentina are sensitive to the fiscal performance of the relevant municipal authority in the recent past.<sup>21</sup> Nevertheless, Latin America's still relatively young democracies have to prove to be stable. According to LAGOS (2001: 138) from "Latinobarometro" an average of 20 percent of the individuals asked in South America and Mexico would support an authoritarian government "in certain situations" as opposed to an average of 7 percent in the European Union.

Last but not least, rural exodus towards the big cities in most if not all Latin American countries indicate that *loyalty* does not have the same intensity and/ or effects than in Switzerland. Here, the bigger regional economic disparities in most parts of Latin America could be an important factor. It can be expected that the opportunity costs of staying in poorer areas rise with bigger gaps in welfare between different locations.

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<sup>21</sup> GRAHAM/ PETTINATO (2000) found for Latin America that a preference for democracy has positive effects on happiness.

And, as HIRSCHMAN (1970: 104) said, loyalty is only a "postponement of exit in spite of dissatisfaction and qualms" - of course there is a point where the expected individual gains from migrating are higher than the benefits from loyalty. It seems that loyalty can be enhanced (amongst other) by the formation of social capital, which has been identified as substantial for economic relations, especially in developing countries (ANNEN 2001). LAGOS (2001) identifies a lack of interpersonal trust which is a prerequisite for the accumulation of social capital.

To conclude this section we remark that the main trend at the core of decentralization in Latin America is one towards coordination. This may be contrasted with the elements of interjurisdictional competition that are taken to be at the heart of fiscal federalism in Switzerland by the literature we review above. This is, where the main positive effects of decentralization can be expected to arise. The numerous sceptics of fiscal federalism are probably also influenced by the poor record of coordinated federalism. Interestingly the opponents do not call for more competition but for recentralization (e.g. PRUD'HOMME 1995; TANZI 2001).

## **4.2 Challenges for an introduction of competitive federalism**

In addition to the problem of avoiding a race-to-the-bottom, the introduction of competitive fiscal federalism in emerging economies is loaded with several challenges. Four issues seem worth discussing:

- the challenge of preserving the internal markets;
- important regional differences;
- the big informal economy compared to industrialized countries;
- corruption.

A severe challenge to decentralization is the maintenance of the *internal markets* (e.g. TANZI 2001). In this context the literature speaks of market-preserving federalism (QIAN/ WEINGAST 1997, OATES 1999): for sustaining an efficient market economy, decentralized governments should face hard budget constraints and have the regulatory responsibility for the economy. And there should be no barriers to trade (OATES 1999: 1138). The value-added tax levied by the federal subunits in Brazil is said to encourage tax war and impede trade between them. Nevertheless, according to the ideas of market-preserving federalism, this kind of competition is not necessarily harmful as long as the states get enough revenues. In particular, if budget constraints are hard and states cannot rely on a bail out from the federal government, they are forced to manage their budget more carefully. Hard budget constraints also have

other positive effects: the federal subunits will have to be more careful when they grant subsidies to attract firms and individuals.<sup>22</sup> In general, the concept of market-preserving federalism seems to neglect the role of a central authority as guardian of competition enforcing general rules for the lower jurisdictions.

Countries with *strong regional disparities* may suffer from centrifugal forces leading to separatist movements. Of course, regional differences are one reason for fiscal federalism where a uniform provision of public services is not perceived to be optimal. However, large differences in income levels exist especially in emerging countries. Some subnational levels can be too poor to provide a minimum of public services. Therefore, the interjurisdictional redistribution plays a crucial role in fiscal federalism.

Tax evasion and a huge *informal economy* are other challenges (VARSANO 2001). SCHNEIDER/ ENSTE (2000: 80) report that the size of the shadow economy in developing countries is systematically larger than in the OECD countries. In Japan, the United States, Austria and Switzerland the shadow economy is estimated to amount to 8-10 percent of GDP. With 25-35 percent Colombia, Brazil, Venezuela and Chile have bigger shadow economies. Mexico's and Peru's share is even estimated to be between 40-60 percent.<sup>23</sup> A low tax compliance and high tax evasion can undermine the ability of federal subunits to raise revenues. To solve this problem, an improvement of tax administration is often advocated. TANZI (2001) expects that there are economies of scale in tax administration and consequently wants taxation to be centralized. On the other hand, there seem to be no obstacles for federal subunits to buy services from a central tax administration.<sup>24</sup> The power to tax and not the actual collection of taxes is crucial. Another way to increase the effectiveness of taxation could be an expansion of political participation. For example POMMERHNE et al. (1994) show that tax evasion is lower under the regime of direct democracy.

The last challenge to discuss is the problem of *corruption* (e.g. PRUD'HOMME 1995, TANZI 2001). According to TANZI local institutions are less developed than national ones, especially in poor countries. The best and most talented people will join the central government. In some regard this statement is a self-fulfilling prophecy: if the possibilities and responsibilities of subnational governments are not strengthened, it is obvious that local institutions cannot be attractive employers. In addition, even

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<sup>22</sup> A characteristic of coordinated federalism seems to be a competition between the states of who grants higher subsidies (obtained from the federal authorities) to attract firms.

<sup>23</sup> The size of the shadow economy is measured as percent of GDP, average over 1990-93.

<sup>24</sup> In Switzerland it even is the other way round: the cantonal tax administrations collect the federal income tax.

centralized countries consist of several levels of administration. The question is, which system offers more discretionary power for the officials. It can also be argued that political control matters. If the people at subnational levels can exercise democratic rights, abuse of power will be more difficult than under a pure bureaucratic hierarchy. The final judgement depends on how one values the principal-agent relationship between central government and local authorities on one side and local authorities and voters on the other side.

## 5 POLICY CONCLUSIONS

Part 3 of this paper has described the Swiss system of competitive federalism. It seems fair to say that fiscal decentralization in Switzerland works as a mechanism for controlling and constraining politicians and thus producing political outcomes better matched to peoples' preferences. Evidence could also be found that fiscal federalism is an important reason for the efficiency of politics and maybe even for the relative economic success of Switzerland.

As the analysis has shown, the Swiss experience provides us with a group of important institutional arrangements working as essential preconditions for mitigating or even averting the potentially negative effects of competitive federalism. In particular, we have recognized intergovernmental redistribution, interjurisdictional compensation mechanisms, elements of direct democracy and loyalty to be crucial institutions for making federalism work. Of course, this enumeration is not necessarily complete. For example the literature stresses elements such as the power to tax, the assignment of functions etc. Last but not least, it seems important that competition should not only operate between states (cantons) but also between municipalities.

In part 4 we state, that the central feature of the ongoing decentralization in Latin America seems to be the idea of cooperation and coordination. The relatively poor record of this kind of federalism has produced a great number of critics of fiscal federalism in general. Differing from those sceptics, in our view the most important flaw of decentralisation in Latin America is the lack of interjurisdictional competition. The analysis in section 4.2 has shown that in addition to the problem of avoiding a race-to-the-bottom there is a group of serious challenges for introducing a properly working system of competitive fiscal federalism in emerging economies. This generalisation seems to be adequate in spite of the fact that every country has its own institutional peculiarities.

According to HAYEK (1978a) institutions are only partly results of human design. Consequently, we always have to take path-dependencies into account when proffering policy advice. First of all we believe that the challenges to the introduction of competitive fiscal federalism are not a reason to abolish the idea altogether. The empirical and theoretical evidence for positive effects seems to be too clear. But, as we have said above, one has to be careful with advocating a simple "transplant" of the Swiss institutional system to emerging economies. Especially the "export" of the concept of direct democracy faces serious problems. Nevertheless, even minor steps towards democratization, especially in the realm of tax autonomy could strengthen fiscal competition in Latin America. Last but not least, the Swiss systems of redistribution and interjurisdictional compensation seem to be relatively simple institutional arrangements which can be easily transferred to other countries. In this case the major problem seems to be the political feasibility in the different countries concerned. In any case it is surely worth taking the Swiss experience seriously - it is probably one of the most interesting and successful laboratories for the working properties of fiscal federalism in the world.

## LITERATURE

- Afonso, José R.R./ de Mello, Luiz (2000): Brazil: An Evolving Federation, mimeo: Paper presented at the Conference on Fiscal Decentralization, IMF Headquarters, Washington D.C., November 2000
- Aghón, Gabriel (1997): Descentralización Fiscal en America Latina: Balance y Principales Desafíos, mimeo: Documento preparado para la Reunión de LASA 1997, México, abril de 1997
- Annen, Kurt (2001): Inclusive and Exclusive Social Capital in the Small-Firm Sector in Developing Countries, in: Journal of Institutional and Theoretical Economics, 157 (2), 319-330
- Blankart, Charles B. (1998): Politische Ökonomie der Zentralisierung der Staats-tätigkeit, Humboldt-Universität zu Berlin: Discussion Paper (Economics Series)
- Blankart, Charles B. (2000): The Process of Government Centralization: A Constitutional View, in: Constitutional Political Economy, 11, 27-39
- Blöchliger, Hansjörg (2000): Ein teures und unwirksames Unterfangen? Die Bundesfinanzierung des kantonalen Strassenbaus, in: Neue Zürcher Zeitung, 11.05.2000, (109), 15
- Blöchliger, Hansjörg/ Frey, René L. (1992): Der schweizerische Föderalismus - Ein Modell für den institutionellen Aufbau der Europäischen Union?, in: Aussenwirtschaft, 47, (Heft IV), 515-548
- Brennan, Geoffrey H./ Buchanan, James M. (1980): The Power to Tax - Analytical Foundations of a Fiscal Constitution, Cambridge: Cambridge Univ. Press
- Eichenberger, Reiner (1994): The Benefits of Federalism and the Risk of Overcentralization, in: Kyklos, 47, (3), 403-420
- Eichenberger, Reiner (2000): Föderalismus - Eine politisch-ökonomische Analyse der Vorteile, Widerstände und Erfolgsbedingungen, in: Verwaltung und Management, 6, 18-28
- Eichenberger, Reiner/ Hosp, Gerald (2001): Die institutionellen Leitplanken wirkungsvollen Föderalismus: Erfahrungen aus der Schweiz, in: Pernthaler, Peter/ Bussjäger, Peter (eds.)(2001): Ökonomische Aspekte des Föderalismus, Wien: Wilhelm Braumüller Verlag, 87-104
- Swiss Federal Tax Administration/ Eidgenössisches Finanzdepartement (2000): Index der Finanzkraft der Kantone für die Jahre 2000 und 2001, Bern: Eidgenössische Finanzverwaltung - Sektion Finanzausgleich und Statistik ([www.efv.admin.ch](http://www.efv.admin.ch))
- Eidgenössisches Finanzdepartement (2001): Staatsquote international, <http://www.admin.ch/efv/finanzen/d/intvergl/intstaq.htm>
- Feld, Lars P. (1997): Exit, Voice and Income Taxes - The Loyalty of Voters, in: European Journal of Political Economy, 455-478

- Feld, Lars P. (2000): Tax competition and income redistribution: An empirical analysis for Switzerland, in: *Public Choice* (105), 125-164
- Feld, Lars P./ Kirchgässner, Gebhard (1997): Public Debt and Budgetary Procedures: Top Down or Bottom Up? Some Evidence from Swiss Municipalities, *Volkswirtschaftliche Abteilung Universität St. Gallen: Discussion Paper Nr.9717*
- Feld, Lars P./ Schneider, Friedrich (2000): State and Local Taxation, in: *International Encyclopedia of Social and Behavioral Science*, 12: Economics. Ashenfelter, Orley (ed.), Amsterdam: Elsevier
- Frey, Bruno S. (1990): Vergleichende Analyse von Institutionen: Die Sicht der politischen Ökonomie, *Staatswissenschaften und Staatspraxis*, 1, 158-175
- Frey, Bruno S./ Bohnet, Iris (1993): Democracy by Competition - Referenda and Federalism in Switzerland, in: *Publius: The Journal of Federalism*, 23, (Spring 1993), 71-81
- Frey, Bruno S./ Eichenberger, Reiner (1996): To Harmonize Or To Compete - That's Not The Question, in: *Journal of Public Economics*, 60, 335-349
- Frey, Bruno S./Eichenberger, Reiner (1999): The New Democratic Federalism for Europe, *Studies in Fiscal Federalism and State-Local Finance*, Cheltenham/Northampton: Edward Elgar
- Fukasaku, Kiichiro/ De Mello Jr., Luiz R., Eds. (1999). La décentralisation budgétaire dans les économies émergentes: problèmes de gestion des affaires publiques. Paris, Centre de Développement de l'Organisation de Coopération et de Développement Économiques
- Graham, Carol/Pettinato, Stefano (2000): Happiness, Markets, and Democracy: Latin America in Comparative Perspective, mimeo, Center on Social and Economic Dynamics, The Brookings Institution: Working Paper No. 13
- Grossman, Philip (1989): Fiscal Decentralization and Government Size, in: *Public Choice*, 62
- Gwartney, James D./ Lawson, Robert A. (1997): *Economic Freedom of the World*, Bonn: Liberales Institut
- Hayek, Friedrich August von (1978a): The Confusion of Language in Political Thought, in: *New Studies in Philosophy, Politics and Economics*. Hayek, Friedrich August von, Chicago: University of Chicago Press, 71-97
- Hayek, Friedrich August von (1978b): Competition as a Discovery Procedure, in: *New Studies in Philosophy, Politics and Economics*. Hayek, Friedrich August von, Chicago: University of Chicago Press, 179-190
- Hirschman, Albert O. (1970): *Exit, Voice and Loyalty*, Cambridge, Mass.: Harvard University Press
- Huther, Jeff/ Shah, Anwar (1996): A Simple Measure of Good Governance and Its Application to the Debate on the Appropriate Level of Fiscal Decentralization, Washington D.C.: World Bank

- Inman, Robert P./Daniel L. Rubinfeld (1997): Rethinking Federalism, in: *Journal of Economic Perspectives*, 11(4), 43-64
- Kirchgässner, Gebhard/ Pommerehne, Werner W. (1994): Die Entwicklung der öffentlichen Finanzen in föderativen Systemen, in: *Staatsaufgaben*. Grimm, Dieter (ed.), Baden-Baden: Nomos, 149-176
- Kirchgässner, Gebhard/ Pommerehne, Werner W. (1996): Tax Harmonization and Tax Competition in the European Union - Lessons from Switzerland, in: *Journal of Public Economics*, 61, 66-82
- Lagos, Marta (2001): Between Stability and Crisis in Latin America, in: *Journal of Democracy*, 12(1), 137-145
- Matusaka, John G. (1995): Fiscal Effects of the Voter Initiative: Evidence from the last 30 Years, in: *Journal of Political Economy*, 103, 587-623
- Musgrave, Richard (1983): Who Should Tax, Where and What?, in: *Tax Assignment in Federal Countries*, ANU, Center for Research on Federal Financial Relations, Canberra
- Musgrave, Richard A. (1997): Devolution, Grants, and Fiscal Competition, in: *Journal of Economic Perspectives*, 11(4), 65-72
- North, Douglass C. (1991): Institutions, in: *Journal of Economic Perspectives*, 5, (1), 97-112
- Oates, Wallace E. (1972): *Fiscal Federalism*, Aldershot: Gregg Revivals
- Oates, Wallace E. (1985): Searching for Leviathan: An Empirical Study, in: *American Economic Review*, 75, 748-757
- Oates, Wallace E. (1989): Searching for Leviathan: A Reply and Some Further Reflections, in: *American Economic Review*, 79, 578-583
- Oates, Wallace E. (1999): An Essay on Fiscal Federalism, in: *Journal of Economic Literature*, XXXVII, (September 1999), 1120-1149
- Qian, Yingyi/ Weingast, Barry R. (1997): Federalism as a Commitment to Preserving Market Incentives, in: *Journal of Economic Perspectives*, 11(4), 83-92
- Persson, Torsten/Guido Tabellini (1994): Does Centralization Increase the Size of Government, in: *European Economic Review*, 38, 765-773
- Pommerehne, Werner W./ Hart, Albert and Frey, Bruno S. (1994): Tax Morale, Tax Evasion, and the Choice of Tax Policy Instruments in Different Political Systems, *Supplement to Public Finance/Finance Publique*, 49, 52-69
- Pommerehne, Werner W./ Schneider, Friedrich (1982): Unbalanced Growth between Public and Private Sectors: An Empirical Examination, in: Robert H. Havemann (ed.), *Public Finance and Public Employment*, Detroit: Wayne State University Press, 309-326
- Pommerehne, Werner W./ Kirchgässner, Gebhard und Feld, Lars P. (1996): Tax Harmonization and Tax Competition at State-Local Levels - Lessons from Switzerland, in: *Developments in Local Government Finance*. Pola,



- Giancarlo/France, George and Levaggi, Rosella (ed.), Cheltenham, Brookfield: Elgar, 292-330
- Porto, Alberto/ Porto, Natalia (2000): Fiscal Decentralization and Voters' Choices as Control, in: *Journal of Applied Economics*, III, (1), 135-167
- Rezk, Ernesto (2000): Recent Developments on Federalism and Decentralization: Lessons from the Argentine Experience, paper presented at the Conference on Fiscal Decentralization, IMF Headquarters, Washington D.C., November 2000
- Saiegh, Sebastián/ Tommasi, Mariano (1998): Why is Argentina's Fiscal Federalism so Inefficient? Entering the Labyrinth, mimeo: Paper prepared for the "Conference on Modernization and Institutional Development in Argentina", PNUD, Buenos Aires, May 20-21 1998
- Schneider, Friedrich/ Enste, Dominik H. (2000): Shadow Economics: Size, Causes, Consequences, in: *Journal of Economic Literature*, XXXVIII, (March 2000), 77-114
- Sinn, Hans-Werner (1990): Tax Harmonization and Tax Competition in Europe, in: *European Economic Review*, 34, 489-504
- Sinn, Hans-Werner (1997): The Selection Principle and Market Failure in Systems Competition, in: *Journal of Public Economics* (66), 247-274
- Stein, Ernesto (1999): Fiscal Decentralization and Government Size in Latin America, in: *Journal of Applied Economics*, II, (2), 357-391
- Tanzi, Vito (2001): Pitfalls on the Road to Fiscal Decentralization, Washington D.C.: Carnegie Endowment Working Paper Nr.19
- Tiebout, C. (1956): A Pure Theory of Local Government Expenditures, in: *Journal of Political Economy*, October, 415-426
- Tommasi, Mariano/ Saiegh, Sebastián/ Sanguinetti, Pablo (2001): Fiscal Federalism in Argentina: Policies, Politics, and Institutional Reform, in: *Economia* 1(2): 147-190
- Varsano, Ricardo (1999): Subnational taxation and treatment of interstate trade in Brazil: problems and a proposed solution, mimeo, Valdivia: The World Bank
- Varsano, Ricardo (2001): Brazil: tax reform and the "fiscal war" in the federation, in: *Federations*, 1(2), March 2001
- Vaubel, Roland (1995): Constitutional Safeguards against Centralization in Federal States: An International Cross-Section Analysis, Universität Mannheim, Beiträge zur Angewandten Wirtschaftsforschung: Discussion Paper 532-95
- Wohlgemuth, Michael/ Adamovich, Ivan Baron (1999): Systemwettbewerb in der Schweiz - Ein Testfall für das Zusammenspiel von "Exit", "Voice" und "Loyalty", Jena: Max-Planck-Institut zur Erforschung von Wirtschaftssystemen.

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