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FUTURE OF THE WELFARE STATE**

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Centre for Economic Policy Research

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ABSTRACT

European Integration and the Future of the Welfare State*

This paper argues that increased factor mobility incurs the risk of dismantling the welfare state, even though this state may have useful allocative functions. It will be difficult to finance the welfare state with taxes on capital and it may be necessary to subsidize this factor in the sense that some of the infrastructure it uses will have to be covered by taxes on other factors. In general, redistribution activities are underprovided, since they provide other countries with positive policy externalities. To overcome these difficulties and to make competition among welfare states workable, the paper suggests taxing capital income on a cash flow basis and other incomes on the basis of a nationality principle.

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NON-TECHNICAL SUMMARY

A free movement of capital, labour, goods and services across the European borders is essential for reaping the full benefits from trade and the division of labour. At the same time, however, these four liberties will greatly increase the competitive pressures on the national fiscal systems. Each state will have to try to attract those economic activities which can make a positive contribution towards its budget and to limit the influx of those people who would be a burden in fiscal terms.

There are two different theoretical positions which lead to opposite expectations about the desirability and likely consequences of the competitive pressures that governments face. The first says that the 'invisible hand' would lead to an efficient organization of competing states in the same way as it leads to an efficient outcome of private markets. Redistribution and social insurance would be offered at the level desired by mature and mobile citizens. The second is based on the 'selection principle'. The argument is that a competition among states is likely to suffer from 'market failure', since the states by their very nature are supposed to carry out those tasks where private markets fail. Reintroducing the market through the backdoor of systems competition is likely to bring about the same type of allocation problems which brought in government activity in the first place.

The paper does not make a choice between these two positions, but it leans towards competitive solutions, since these are simpler and allow for a better monitoring of government activities. It identifies the reasons for 'market failure' in the interaction among welfare states and designs rules for state behaviour that eliminate these reasons within a competitive framework. Its aim is to make the competition among welfare states workable.

One problem analysed is the possibility of taxing mobile capital when there is infrastructure investment. It is argued that increasing returns to scale in the provision of infrastructure make it necessary to subsidize capital in the sense that the cost of providing the infrastructure cannot be born fully by capital itself, but must be born partly by other factors. Thus a tax on capital income cannot be used as a source of finance for the welfare state. On the contrary, capital itself is becoming a kind of welfare recipient.

To overcome this problem, the paper recommends the use of cash flow taxes on capital. Cash flow taxes keep equity trapped in the firm and leave marginal investment projects tax-free. They make it possible to avoid the subsidization

of capital and may even be able to collect enough revenue to make a contribution towards social goals.

Even without mobile capital, the welfare state has difficulty in surviving fiscal competition, if both rich and poor people can freely move across borders. Taking from the rich and giving to the poor can be seen as a useful insurance device in an uncertain world where people cannot foresee their destinies. This insurance will no longer be possible, if people can choose their country of residence after the dice of destiny has been cast, i.e. after they know their incomes. Each single welfare state will have an incentive to scale down its activities, since this will deter the net recipients of public funds and attract the net contributors.

To avoid this difficulty it is recommended that the competing countries agree to use a nationality principle for that part of their tax revenue which serves redistributive purposes. The nationality principle excludes the possibility of people reducing their tax burden by migrating to other countries, and it eliminates the ruinous pressures resulting from the possibility of free migration. It replaces anarchy, in the interaction of welfare states, with a set of rules that make the competition between these states workable. Contrary to a tempting semantic interpretation of the nationality principle, it is this principle which will make it possible to harmonize social and libertarian policy goals.

European Integration and the Future of the Welfare State

The final goal of the European Union is the realisation of the "four liberties": the free movement of capital, labour, goods and services across its internal borders. While much has already been achieved with the dismantling of customs barriers on January 1, 1993, the introduction of the euro will be another major advance towards this goal. What are the implications of this development for the welfare state? Will it survive unchanged, and if there are changes, can we hope that they will be for the better?

Achieving the four liberties is essential for reaping the full benefits from trade and the division of labour across Europe. At the same time, however, these four liberties will greatly increase the competitive pressures on the national fiscal systems. In a setting where mobility of people, goods and factors of production is steadily increasing, each state will have to try to attract those economic activities which can make a positive contribution to its budget and to limit the influx of indigent people who would be a burden in fiscal terms. In a certain sense, the states of the European Union would have to act like firms which always have to bear in mind the mobility of their customers when making their product and pricing decisions. This article discusses the potential implications for the European welfare state.

Mobility and Fiscal Competition

Clearly, the vast majority of people and most factors of production are not (yet) mobile. On average, there is a great deal of inertia withstanding the economic incentives to move across the borders. But that is beside the point, because *marginal* mobility is all that is needed to set fiscal competition in motion. It is sufficient for governments to feel the political pressure of factor mobility if only some people and some factors of production react to differences in incomes or factor rewards. It is not necessary that all or most people are mobile. This is similar to private markets. The competitive behaviour of firms is also guided by marginal demand, and the behaviour of inframarginal buyers is irrelevant.

In many respects there is already marginal mobility. Capital is especially mobile. When Germany tried to introduce a moderate tax of 10% on interest rates not all financial

capital left the country, but, according to rough estimates, some 100 billion DM did, and this was enough to force the German government to quickly abandon the measure. Similarly, when in 1981 the Reagan administration introduced a tax reform granting massive investment incentives a wave of excessive capital imports into the United States began which seriously strained the global capital markets and had more than marginal consequences.

There is also without doubt a very high degree of mobility of goods within the European Union. This mobility has long been one of the characteristics of the European common markets and by now almost all institutional barriers to trade have been lifted. The establishment of the single market in 1994 has enabled insurance and banking companies to offer their services across national borders.

Finally, human beings are mobile. At the upper end of the income scale there are many examples of people moving to countries with low taxes. The Bahamas, San Marino or Monaco do not rely exclusively on tourism to make a living. At the lower end of the income scale there are the guest workers and economic refugees who have responded to existing economic incentives. Even in large countries like Germany and France the number of foreigners in the population has risen to over 6%. The fall of the Berlin wall also increased the importance of labour mobility. In addition to immigration by people of German origin, there seems to be a very high degree of mobility of foreign immigrants from the east. The *differential* mobility between the EU member states is particularly high for people from other parts of the world who have already decided to leave their home countries and are now facing the choice of a particular host country. As there is hardly any difference in the cost of migration to the various EU states for them, their migration decision will depend fully on the economic conditions they can expect.¹

Those developments might not call for immediate action and there is probably no need for any profound changes in our welfare systems in the near future. However, as the intra-european mobility becomes more important and the right to move freely is more widely used, the competitive pressures on the national institutions are going to increase. These pressures will be particularly strong if, for legal or economic reasons, no discrimination

¹See Sinn (1995a).

between immigrants and the local population is possible. Marginal mobility and non-discrimination are sufficient to produce strong competitive pressure on the institutions concerned.

Two Contrary Positions

There are two different basic theoretical positions which lead to opposite a priori assumptions about the desirability and the likely consequences of the competitive pressures that governments face. The first, possibly held by the majority of economists, is based on the notion of efficient systems competition.² It is argued that the "invisible hand" would lead to an efficient organisation of competing states in the same way as it leads to an efficient outcome in private markets. The states would only produce those public goods that are needed and in return would levy equivalence taxes to be paid by the beneficiaries of the public goods. Redistribution and social security would be offered at the level desired by mature and mobile citizens. The competition of the states is seen as an open dynamic process leaving ample room for innovations both with regard to the services the states provide and to how the money is raised to pay the bill. European integration should therefore put more emphasis on systems competition and should avoid strengthening centralised European institutions except for those aimed at coping with externalities across national borders. Any attempt to create a centralised institution should have to be justified in terms of "market failure" - where the market here involves the interaction of the states.

The other theoretical position I have called the "selection principle".³ According to the selection principle, the competition of states will not work even in the absence of cross border externalities and European public goods, since the states by their very nature are supposed to carry out exactly those tasks where private markets fail. Since market failure is at the very basis of the duties of the state, it makes little sense to reintroduce markets through the back door of systems competition. If, e.g., the public goods that the state provides would lead to ruinous competition when provided by the private sector, would not competition between

²See Tiebout (1961), Buchanan (1965) or, to take a more recent example, Siebert (1997)

³See Sinn (1997).

states be ruinous as well? And if, arguably, the welfare state did evolve in order to avoid the problems of adverse selection in a private insurance equilibrium, isn't it likely that systems competition would also suffer from the problem of adverse selection? According to the selection hypothesis, a centralised solution would be the best in all those areas where increased mobility leads to intensified systems competition between states. The burden of proof would then rest with those who favour decentralised solutions.

Preference for Decentralised Solutions

It is difficult, and probably not even necessary, to decide which of two contrary positions is correct. While the selection principle has its theoretical merits, I hesitate to make my policy conclusions fully dependent on this principle. For pragmatic reasons, and in accordance with the Maastricht treaty which has opted in favour of the subsidiarity principle, there is a strong argument to be made for decentralised solutions. Given the existing situation in Europe, the decentralised solutions are simple ones. There would be no need to establish a new European state from scratch, with all the damages and uncertainties this would imply. Decentralised solutions have the added benefit of keeping decision making closer to the people which has obvious information advantages. A remote bureaucracy would be difficult to control and would tend to make decisions that would in general not be well adapted to the specific local circumstances.

A particularly strong argument in favour of systems competition is that such competition might help limit the continually expanding economic activities of the states and improve their current organisational structure. The examples of uncontrolled proliferation of government activity are so numerous that systems competition which effectively limits government expansion is an appealing prospect for many.

However, because decentralised solutions will generally be favoured, a detailed analysis of the possible pitfalls and dangers of systems competition is necessary. Only in areas where systems competition will fail can we identify policy measures aimed at improving the functioning of systems competition. Only where it turns out that such measures are not available, should centralised solutions be considered. Failure of systems competitions would,

however, only be a necessary and not a sufficient reason for centralisation. Before a decision to centralise is taken, it would be necessary to find out whether or not the costs of such centralisation in terms of creating the necessary bureaucracy might outweigh the benefits.

The following sections will focus on pure fiscal competition affecting both the revenues and expenditure of the welfare state. A discussion of corporate taxation is followed first by a more general analysis of national redistribution policies and then by an extension to the case of competitive production of public goods. For the reasons given above, the analysis will concentrate on aspects of systems competition that will lead to inefficient outcomes and on possible remedies for the inefficiencies.

Capital Taxation under Competition

Traditionally, the taxation of capital income has been a major source of revenue out of which welfare programs could be financed. However, there is the risk that this source may, with the passage of time, gradually die out.

Over the last two decades there have already been significant reductions in corporate taxes on retained earnings. The French tax rate decreased by 17 percentage points, the American by 14, the British by 19 and the Japanese by 3,5 percentage points. The unweighted average in G-7 countries decreased by 8 percentage points. Even Germany, which needs its tax revenue for the new Länder, has been forced to follow this trend by reducing its rate from 50 to 45 percent and a second, more radical tax cut is under consideration. There has also been major tax relief for interest income. Sweden and Austria have even given up the principle of synthetic income taxation so as to make it possible to lower their tax rates on interest income to 30% and 25%, respectively.

It is not clear that all of these countries have really carried out their reforms in order to become more attractive havens for mobile capital. Other reasons could be the attempt to stimulate internal growth or the strength of producer lobbying. Moreover, some of the countries, notably the US, have broadened their corporate tax bases in exchange for the tax cuts. On the other hand, looking at the internal political discussion in the respective countries shows that tax competition arguments have been extensively used to defend and demand the

tax reforms. This is definitely true for Germany where even the official name of a recent tax law ("Standortsicherungsgesetz") alludes to tax competition. It is also true for Sweden, where tax policy towards the corporate sector may well be described as an endeavour to keep returns on domestic investment after tax on a par with, or above, the returns available abroad.

Whatever the appropriate interpretation of the previous tax cuts is, I find it very likely that tax competition will become an even more important driving force behind tax reforms in the decades to come. Globalization and European integration will be working together to punish countries which overlook the forces of tax competition and to reward those which react quickly and decisively to the competitive pressures.

As integration increases, the mobility of capital will also increase, and it will become more and more difficult to tax this factor of production for the purpose of transferring resources to the needy. Any country that tries to impose substantial taxes on the return to capital is in danger of hurting itself.

This can easily be demonstrated in the small-country case when capital is perfectly mobile and is taxed according to the source principle. As the net-of-tax rate of return that capital can earn abroad is given, the net-of-tax rate of return at home will have to be equal to that rate regardless of the national tax policy. Any tax on capital would be borne entirely by the immobile factors of production. Starting from a high tax situation, a reduction in the source tax on capital income would result in capital imports and this would increase the demand for the immobile factors of production. The earnings of the immobile factors would increase, compensating for the loss of tax revenue. In fact, there would even be overcompensation since the excess burden of taxation would be removed. Even if the immobile factors were called upon to compensate for the full capital income tax loss, the reduction in capital income taxation would be in their best interest.

When borders were closed the shifting of the tax burden would not be possible. Since tax incidence and tax burden would coincide, a decrease in capital income taxation would increase the net-of-tax rate of return to capital and leave the gross earnings of the immobile factors unchanged. The net income of the immobile factors would fall if the state called upon them to compensate for the lower capital income tax revenue. The only possible

mechanism by which the immobile factors could benefit would be via increased capital formation from increased savings. This would increase the earnings of the immobile factors in the very long run. The result would be similar if all European countries were to reduce their taxes on capital income simultaneously. However, since such a reduction would hardly be able to attract more capital to the single country, the main motivation for such a policy would all but disappear. Indeed, it is only fiscal competition which can be expected to lead to an erosion of capital income taxation.

In reality, the erosion would not be complete since normally public infrastructure has to be provided in order to accommodate capital in the first place. For any individual state it only makes sense to reduce the capital income tax rate to the point where it is equal to the marginal cost of hosting the capital. Nevertheless, it remains true that fiscal competition will make it very difficult, if not impossible, to tax capital at a level that would provide a significant contribution towards the general budget. No tax higher than the marginal cost of providing infrastructure is possible.

A further simplifying assumption of the analysis involved the source principle for capital income taxation. This principle applies to the taxation of retained earnings, but not to the taxation of distributed earnings. If new share issues rather than withheld dividends were used as the marginal source of finance, double taxation agreements would effectively establish the residence principle. Under the residence principle a mere transborder transfer of capital would not be a way of escaping taxation. It would, however, still be possible to avoid taxes by changing the country of residence and shifting the tax base to areas with lower taxes. A change in residency would change the place where the tax is levied, even if there are no capital movements. This possibility would also lead to an erosion of capital income tax revenue. However, retained earnings are by far the major source of equity finance and source taxes are therefore indeed relevant for cross border flows of direct investment.

Preventing the Erosion of Capital Income Taxation

The erosion of the capital income tax is not necessarily to be deplored, since the inefficiencies of capital taxation which result from double taxation of savings and which lead to lower economic growth, are well known. Furthermore, a capital income tax in the true sense of this word is difficult to put into practice: in its ideal form it would be a tax on increases in net wealth and this would be impossible to implement. Legislation which has attempted, with moderate success, to implement public finance theories dating back to the last century has done so largely without noticing that in the meantime theory has advanced. An alternative to capital income taxation would be the cash-flow taxes as were advocated by the Meade Committee (1978) and others.⁴ At the root of all cash-flow tax proposals is the immediate write-off of real investments. An immediate write-off eliminates the double taxation of savings and avoids the valuation problems that make capital income taxation such an impractical proposition. Last but not least, an immediate write-off has the major advantage of rendering the cash-flow tax immune to fiscal erosion under tax competition.

Switching to a system of immediate write-off for new investment while abandoning the depreciation possibilities for the existing capital stock would not result in any effective tax changes for stationary companies whose gross investment is equal to true economic depreciation and whose capital stock is therefore constant. However, growing companies would be favoured by such a measure because net investment could be deducted from their tax bases in addition to true economic depreciation. Conversely, contracting firms would be taxed more heavily because they would be able to deduct no more than true economic depreciation minus disinvestment. Taken together, the increased fiscal burden on disinvestment and the tax relief for new investment are an effective protection against fiscal erosion due to systems competition. Existing capital cannot be moved out of the country without paying taxes, whereas new capital is free from any taxation - at least for marginal investment projects. By granting an immediate write-off the state is participating not only in the returns to investment but also in the initial investment itself. As a fair and sleeping partner,

⁴See, e.g., Sinn (1987)

it would not have to worry about tax increases leading to a flight of capital, nor could it hope to attract more capital by cutting taxes.

It is true that, despite these virtues, even cash flow taxes would not be fully neutral in all respects. Cash flow taxes would not eliminate the incentive to shift profits across borders by using transfer pricing tricks, and they would not be neutral if the tax rate is expected to change over time⁵. Of course, the real world is no Cockaigne, and there is no tax that is fully neutral with regard to each and every decision. However, in the context of international tax competition I believe that cash flow taxes are better than all available alternatives. Even poll taxes would induce higher distortions since they could be avoided by leaving the country.

The introduction of cash-flow taxes would be a possible solution to making tax competition functional and ensuring the welfare state a persistent tax revenue. It is in the interest of any single state to introduce such a system of taxation, on its own if need be, and it is also in the interest of the Union as a whole.

Two Alternatives

Should the above solution not be chosen, there are essentially two alternatives left. One would be to simply put up with the creeping erosion of capital taxation. In view of the already greatly improved earnings prospects for owners of capital as a result of recent developments, it would probably very difficult to get this alternative accepted because of its repercussions on the income distribution. Europe is currently at a stage of development where, in addition to competition from the Far East, which has been occurring for some time, there is now low wage competition and immigration from Eastern Europe. A significant deterioration in the distributive situation of west European workers is probably difficult to avoid in such a situation. It would not appear wise to reinforce this trend towards greater inequality by abandoning capital taxation altogether.

The second alternative would consist of delegating capital income taxation to the European Union or at least harmonising the tax systems, but this measure would be equally

⁵See Sandmo (1979) and Howitt/Sinn (1986).

problematic. In addition to the fact that the current system of capital income taxation, which is harmful for growth, would continue, there would continue to be prospect of capital flight to third countries. Europe itself is engaged in intense competition for capital with other continents. The very same reasons that argue against the levying of capital income taxes at a national level would also apply to the European Union as a whole. Even Europe does not exist in isolation from the rest of the world.

Danger Ahead for the Welfare State

Fiscal competition does not only limit the chances of taxing capital income and of generating the funds needed for welfare programs. Its consequences for policies aimed at redistributing labour income are quite similar and possibly even further reaching with implications for the very existence of the welfare state. The ability of the welfare state to redistribute income among its citizens diminishes, and the welfare loss resulting from the futile attempt to do so increases.

The kind of problem that results from increasing mobility can be illustrated particularly well in the hypothetical extreme case where some categories of labour are completely mobile at the margin while others are entirely immobile. Continuing a policy of redistributing among the mobile categories would, in this case, be absurd from the national point of view.

On the one hand the net income of marginally mobile income groups would be determined by the income situation abroad. Any attempt to either increase or decrease the net incomes of the mobile parts of the population would lead to migration until changes in gross income and price levels made real net incomes constant. For example, reduced taxation of low incomes would lead to immigration, and therefore a reduction in gross wages and to increased costs of housing, until the benefits all but disappeared. For a small open economy with perfect marginal labour mobility, there is no way of changing the net-of-tax income distribution among the mobile income groups by changing the progressivity of the income tax schedule.

Furthermore, the immobile factors of production would have to pay for the futile attempt to redistribute income between the marginally mobile factors of production.

Redistribution implies that the rich contribute more, and the poor less, to the national product than they receive. Intensified redistribution that would result in migration and lead to a fall in the number of rich and an increase in the number of poor people in the country, reduces the net contribution of the rich and increases the net transfer to the poor. Even if fiscal balance were to be preserved with regard to the tax and transfer flows concerning the two groups considered, there would be a real income loss for the immobile factors of production. This situation is similar to the one described in the last section for capital income taxation. Any attempt to create an income distribution between the mobile factors which is different from that in the rest of Europe would, from a national point of view, lead to efficiency losses in the sense that the incomes of the immobile factors of production would fall.⁶

The current reality in Europe may be sufficiently removed from this extreme case for day-to-day politics to neglect those mechanisms. However, the question of an adequate financial constitution within the European Union is not a matter of day-to-day politics. If the freedom of movement within the European Union, as intended, becomes perfect, these mechanisms can no longer be ignored. Furthermore, the importance of marginal mobility and the principle of non-discrimination should be born in mind. The category of immigrants from third countries is growing at such a rate that already there are some immediate threats to the welfare state.

Efficiency Gains due to Redistribution

Opinions about the desirability of an erosion of the welfare state in Europe are divided. Under the protection of the welfare state the complacency and lack of initiative have reached threatening levels. Rolling back the welfare state by means of systems competition could improve work incentives and welfare. It could therefore be argued that, for the time being, there is no need for institutional precautions that would further slow down developments which should have already taken place some time ago.

However, there are also efficiency gains that can be attributed to effective income redistribution. In a stochastic environment, redistribution by means of progressive income

⁶See Wildasin (1991).

taxation, social transfers and public assistance can be interpreted as genuine insurance, bringing the economy nearer to the state of Pareto efficiency. Each and every insurance contract is a redistributive contract and many forms of redistribution can be interpreted as insurance. Insurance and redistribution are two sides of the same coin. In a world where the individual income position does not solely depend on your own performance but also on chance events that are outside your control, the redistributive activities of the state must not be classified as a priori harmful to efficiency. The promise of social protection creates a sense of security and encourages citizens to take up risky and rewarding opportunities rather than ignore them. The provision of security and the strengthening of the people's readiness to run risks are allocative benefits that must be weighed against reduced performance incentives.⁷

The question which of the two is more important cannot be resolved here. But it seems unlikely that unabated competition of fiscal systems would lead to an optimal social policy in the long run. Even if all European countries wanted a welfare state, it would still be difficult to realise this state in a framework of systems competition. A Europe with free migration would be similar to an insurance market where the insurance company could be chosen after the event; i.e., when it is known whether a damage has occurred and, if so, how large it was. Such a market would collapse because of the problem of adverse selection. Adverse selection is one of the major problems why private markets proved unable to offer the kind of lifetime career insurance which the welfare state provides. Creating a market in which welfare states have to compete is likely to suffer from the same problem which prevented private insurance markets from doing the job in the first place. This is a clear sign of the selection principle being at work.

Positive Migration Externalities

The deeper reason why competitive solutions lead to inefficiency lies in the positive migration externalities that are caused by migration. To the extent that redistribution drives away the rich and attracts the poor, the equalising effect is passed on to other countries because there the factor incomes of the rich will decline and those of the poor will increase. The

⁷For an explicit model that incorporates the two effects of redistribution in a stochastic world see Sinn (1995b).

redistribution from rich to poor induces a slightly lower variation of gross incomes in the rest of the world and thus helps foreign welfare states approach their objectives for nothing. The foreign improvement in social equality is a positive external effect that, since it is not taken into account by national policies, leads to an sub-optimal provision of social security in Europe.

An obvious solution which internalises this external effect, would be to delegate redistribution to a centralised European institution. If the redistribution system were uniform across countries, the competitive erosion of the welfare state could not take place. Indeed, a comparison with existing federal states shows that this is the solution most commonly employed. The redistribution via personal income taxation tends to be decided at the federal rather than the local level. However, to apply such a system in Europe would be very problematic as long as great foreseen differences in average income across the European countries remain. Under these circumstances, a uniform redistribution scheme across Europe would imply massive transfers from richer to poorer countries which would not qualify as welfare enhancing insurance, because it equalised pre-existing inequalities. The example of German unification has demonstrated with great clarity the kind of problems such a scheme would entail. An attempt to transpose the German experiment to a European scale would almost certainly mark the end of the European Union.

The Nationality Principle

The introduction of the nationality principle is an alternative that ought to be considered. The tax system would have to be split into two components. One component would be used to finance public goods and could still be levied in accordance with the residence or source principle. Part of this component would be the cash-flow tax proposed above as a substitute for capital income taxation. The other component would be made up of redistributive taxes that would depend on the nationality of the taxpayer. Irrespective of the country of residence of the taxpayer, he would always have to pay his redistributive taxes to his home country and it would be his home country that would pay any social transfers if needed.

The nationality principle would encounter substantial administrative difficulties, since a functioning international reporting system would have to be established⁸. Without such a system the incentives for tax evasion would likely be destructive. However, the administrative difficulties would not be prohibitive. The United States has been making use of the nationality principle for a long time, using sophisticated monitoring strategies which include, among other things, the establishment of monitoring agencies located within the boundaries of foreign countries. The US experience could be used to help design a cooperative European monitoring system. The design of such a system should not be seen as a sinister cartelization attempt by Leviathan governments, but rather as a precondition for making competition workable. Even in a market economy, competition cannot work without a strong government that sets and enforces the rules of the game. Competition is not the same as anarchy. Like private competition, competition between states requires a minimum of common agreement about the rules of the game.

The introduction of the nationality principle could be combined with the possibility of changing one's nationality, but this would have to be limited to a decision early in life. Later on, the change of nationality should be made more difficult, if not impossible, to limit the erosion of social security due to systems competition.

There is no contradiction between the freedom of individual choice and the nationality principle even though, semantically, the concept of nationality might suggest this interpretation. In fact, the principle is a safeguard for, rather than an obstacle to, individual freedom. Without this principle there would be a real danger that some day the old borders of Europe would have to be re-established to offer protection from the fiscal erosion caused by systems competition.

The redistribution of income according to the nationality principle would also help defuse the problem of immigration from third countries. Since immigrants cannot participate in the national redistribution, neither fiscally motivated deportation competition nor immigration for the purpose of reaping the benefits of the welfare state would be triggered. In

⁸Currently, such a system is not used in Europe. As reported by Agell, Englund and Södersten (1996), Sweden has not even been able to implement the residence principle.

extreme cases help, on the basis of the residence principle, to prevent people living in acute poverty could easily be reconciled with the nationality principle .

Financing Public Goods and the Scope for Redistributive Policies

Competition between tax systems restricts fiscal redistribution but as long as a service package is offered by the state to the mobile factors of production, it should not force tax rates to tend to zero. Instead, it would result in equivalence taxes that should be interpreted more as fees or prices for state services than as genuine taxes.

However, in a competitive environment, equivalence taxes only deserve their name with regard to marginal costs of accommodating mobile factors of production. When the government aims at maximising the incomes of the immobile factors of production it will try to attract a mobile factor of production up to the point where the increase in GDP produced by one additional unit of this factor would just equal the factor cost plus the marginal cost of using the public good. The tax increase is therefore chosen so as to equal the marginal cost of the public good in question.

Under-funding of Public Expenditure

If public goods were subject to constant or increasing returns to scale, marginal cost taxation would generate enough revenue to cover the total cost of providing the public good. However, goods that are provided by the state are typically goods with increasing returns to scale or declining average costs, i.e. goods whose average cost exceeds their marginal cost. Examples include contributions to public infrastructure such as roads and public buildings, communication networks, or administrative authorities for which fixed costs are high relative to variable costs. In such instances the private market does not work well because it leads to a situation of ruinous competition, and, for this very reason, systems competition cannot work either. Indeed, there will be a fiscal deficit from the provision of public goods, which has to be covered from other sources.

The problem is somewhat lowered if there are congestion costs associated with the use of the public good. These in turn lead to an increase in the marginal private costs of using

the public good. If this marginal cost is above the average cost, the financing problem can be avoided. However, such a situation is not normally to be expected since, if congestion problems are sufficiently important, the production of the good should be privatised anyway. If the selection principle is correct and if the state limits itself to the activities it is supposed to engage in, the danger of under-funding of public expenditure cannot be denied.

Under-funding does not ruin the state. If the immobile factors of production can be taxed, they will have to foot the bill. This would again be in their best interest since the attempt to make mobile factors of production carry the total cost of providing the public good would put the immobile factors in a worse position. They would *pay* less tax, but they would not *bear* less tax. The mobile factors of production which have safe income alternatives abroad would be able to shift the full cost of taxes onto the immobile factors and make them bear the burden.

The under-funding does not imply an underprovision of public goods.⁹ However, despite fiscal competition, it does aggravate the problem of redistributing income. This not only puts the task of redistribution at risk, but may also result in an inverse redistribution to the further disadvantage of the very social groups the welfare state actually wants to support. The groups that are among the immobile factors of production include the old and sick, the rural population, workers and the smaller or medium sized companies. Fiscal policies that increase the fiscal burden on those groups to the benefit of those who could avoid the tax by emigration cannot expect to find social acceptance.

It should not be thought that this pessimistic situation will become relevant in the near future. Europe today is only at the beginning of integration and fiscal competition. However, the danger of under-funding of public goods through tax competition in the long term should not be dismissed out of hand. The architects of Europe must take protective measures in time.

Inside Germany an effective measure against the erosion of tax bases was created through the use of standardised federal taxes from which regional bodies get a fixed proportion of the tax receipts collected within their territories. What they spend the money on

⁹See Sinn (1997).

is decided at the local authority level. This policy avoids tax competition and at the same time utilises the local information advantage of the lower authorities and organisations to ensure attractive packages of public goods. Some day, when the EU has become a federation, perhaps a similar model could be implemented in Europe.

An alternative that, at least in the medium term, deserves consideration is once again the nationality principle. The nationality principle is a measure that would avoid centralisation by making fiscal competition more efficient.

Conclusions

Overall it is to be expected that increased fiscal competition in Europe will, in the longer term, significantly change the face of the state. There will be some incentive for the state to become more efficient.

However, the dangers cannot be dismissed. Nothing justifies us assuming that the process of competition will stop at the right moment and will not degenerate in the way described above. As the selection principle does not allow us to draw simple analogies between private and public sector competition, the task is to be watchful and to follow the development of Europe with healthy suspicion. An attempt can be made to avoid mistakes by means of the policies suggested, but if this does not suffice then European solutions will have to be considered. Ultimately, it may well turn out necessary to found the United States of Europe.

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References

- Agell, J., P. Englund, and J. Södersten (1996): "Tax Reform of the Century - The Swedish Experiment", *National Tax Journal* 49, pp. 643-664.
- Buchanan, J. M. (1965): "An Economic Theory of Clubs", *Economica* 23, pp. 1-14.

- Howitt, P., and H.-W. Sinn (1989): "Gradual Reforms of Capital Income Taxation", *American Economic Review* 79, S. 106-124.
- Sandmo, A. (1979): "A Note on the Cash Flow Corporation Tax", *Economics Letters* 4, pp. 173-176.
- Sinn, H.-W. (1987): *Capital Income Taxation and Resource Allocation*, North Holland: Amsterdam, New York, Oxford, and Tokyo.
- , (1995a): "Implikationen der vier Grundfreiheiten für eine nationale Fiskalpolitik", *Wirtschaftsdienst* 75, pp. 240-249.
- , (1995b): "A Theory of the Welfare State", *Scandinavian Journal of Economics* 97, pp. 495-526.
- , (1997): "The Selection Principle and Market Failure in Systems Competition", *Journal of Public Economics* 66, pp. 247-274.
- Siebert, H. (1997): "Disziplinierung der nationalen Wirtschaftspolitik durch die internationale Kapitalmobilität", lecture held on September 24th, 1997 at the annual meeting of the Verein für Socialpolitik in Bern.
- Tiebout, Ch. M. (1961): "An Economic Theory of Fiscal Decentralization", in: *Public Finances: Needs, Sources and Utilization*, A conference of the Universities - National Bureau Committee for Economic Research, Princeton University Press: Princeton, pp. 79-96.
- Wildasin, D.E. (1991): "Income Redistribution in a Common Labor Market", *American Economic Review* 81, pp. 757-774.