

## The Fiscal Constraints on Social Democracy

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Jonathon W. Moses\*

# The Fiscal Constraints on Social Democracy

Although social democracy, as an electoral phenomenon, still seems to dominate the Nordic landscape, it is a ghost of spirits-past. The economic and social policies which once accompanied social democratic political hegemony have been (or are quickly being) put to rest. Unemployment levels in all four of the Nordic countries are at record high levels, and immediate relief is not in sight. From the perspective of a large segment of contemporary macroeconomic theory, the failure is partly understandable, partly an anomaly. To the extent that a small open economy was dependent on an autonomous monetary policy for securing its full-employment internal balance, it is not surprising

that this instrument has been undermined by the advent of freer capital flows and a commitment to fixed exchange rate regimes. On the other hand, the same environment should be more conducive to pursuing an active fiscal policy.<sup>1</sup>

Herein lies the dilemma. The Nordic economies have been unable to effectively wield their fiscal policies to minimize unemployment levels. In theory, a world with free financial capital mobility (henceforth, just capital mobility) and fixed exchange rates should provide greater opportunities for small open economies to finance their fiscal policy ambitions. In practice, fiscal policies are either being miss-used or they are not as effective as our theoretical schema would lead us to believe. The answer to this dilemma is an open empirical question, to which the remainder of the article is committed.

The article is organized around the three (possible) means of funding fiscal policies: money creation, taxation and bond sales.<sup>2</sup> Whereas the first is a theoretical impossibility given our interest in studying the constraints placed on small open economies in a world with free capital mobility

\* Department of Sociology and Political Science, University of Trondheim. Following the Swedish example, I have incurred large debts in the writing of this paper. I benefitted greatly from discussions with participants at the 1994 NOPEC conference in Oslo. In particular, I am grateful for the advice and assistance of Per Gunnar Berglund, Jeffrey Frieden, Mark Hallerberg, Ingunn Lønning, Haakon Vennemo and Michael Wallerstein. Obviously, I alone am responsible for the material herein.

and fixed exchange rates, it is necessary to address the (potential) loss of revenue from abandoning this option in the new economic environment. The second and third means of funding are both theoretically possible and widely used in this new economic environment.

The bulk of this article aims to estimate the degree to which the four Nordic countries have lost potential revenue sources of the first type, and to measure the degree to which they have become dependent on the second and third sources for financing their fiscal ambitions. It is an ambitious project; and this article intends a rough cut at the data. Although the evidence provided is highly inconclusive, I offer some conjectures on the degree to which small open economies might preserve deviant fiscal policies. I conclude by suggesting that opportunities for financing fiscal policies in small open economies do not appear to be more constrained now than in previous periods. The nature of financing, however, has changed and this will have important distributional consequences. Thus, the current social democratic predicament seems to be the result of the inability of fiscal policies to increase sufficiently to fill the void left by the decreasing utility of autonomous monetary policies.

## Types of Constraints

### *Money Creation*

In general economic terms, revenues from inflation are seen as useful when the marginal costs from inflation are equal to the marginal costs of using other tax revenues that are equally distorting.<sup>3</sup> Inflationary revenues can be gathered under two rubrics: unanticipated and anticipated. Generally, economists do not concern themselves with unanticipated (so-called surprise) inflationary revenues,

as they are considered to be inconsequential. Governments, they argue, are not able to employ these instruments systematically in a world with rational expectations.<sup>4</sup> Seigniorage, or anticipated inflationary revenues, however, were and can be used systematically by governments, given the right environment.

Of course, if there was completely free capital mobility we should expect to find a world market clearing for goods, money and bonds. With fixed exchange rates, domestic and foreign money (as assets) would become perfect substitutes. Thus, with the advent of freer capital mobility (and the maintenance of more fixed rates of exchange), revenues accrued by money creation are made irrelevant: they are ruled out by definition. In other words, money creation revenues represent a potential loss of revenue over time. To measure how much revenue is potentially lost in the new economic environment, it is warranted to ask how dependent small open economies traditionally have been on money creation revenues. In particular, one needs to investigate the degree to which these small open economies have relied on seigniorage revenues as a means of financing their ambitious fiscal policies.<sup>5</sup> To what extent is that revenue source no longer accessible?

There are several ways to measure the significance of the seigniorage constraint; we will apply a relatively simple measure of seigniorage revenues: the change in the monetary base. While there may be better, though more taxing, ways of measuring the different types of seigniorage revenues, we will leave them for another time and place.<sup>6</sup> Our concern for the time being is to simply get a glimpse of the seigniorage revenue potential for the four Nordic countries.

Once the means of operationalizati-

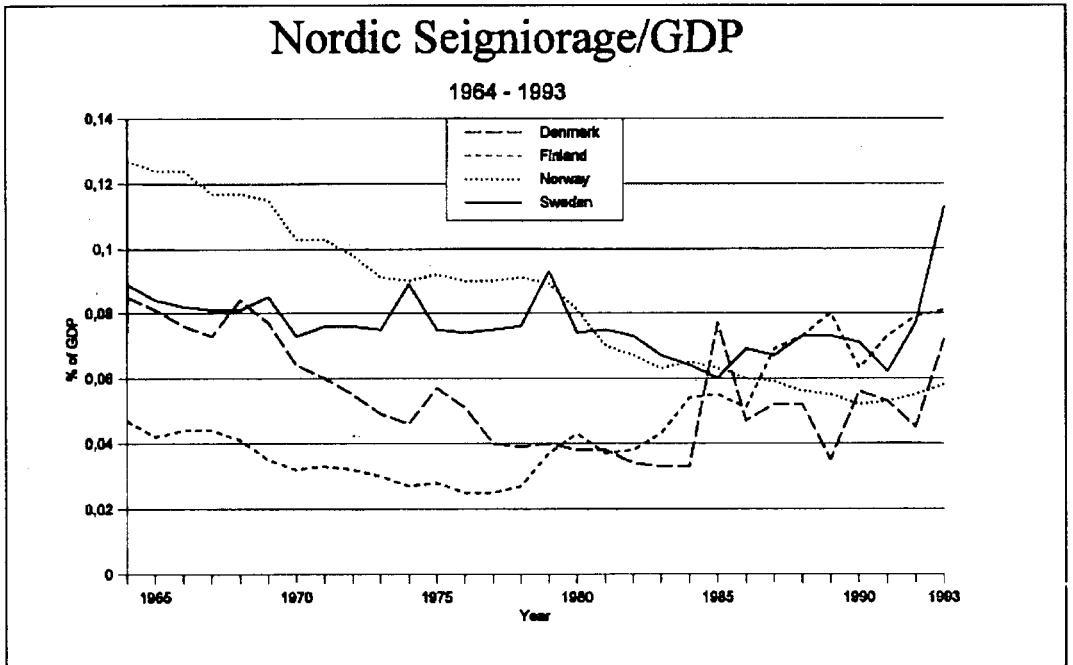


Figure 1 -Source: IMF (1994: lines 14/99b)

on are chosen, the method of application can be just as controversial. One way to measure the significance of this constraint is to look directly at the extent to which potential members currently rely on revenues from seigniorage, and compare this with what would accrue in a more fixed exchange rate regime, or monetary union.<sup>7</sup> Another means is to compare prevailing budget deficits with those that might be necessary to stabilize debt ratios in a hard-currency regime (Bredenkamp and Deppler 1990:354). I have decided to use a much simpler measure: to compare changes in monetary bases over the past thirty years. This should give us an idea of how much access to seigniorage revenues has declined with the advent of freer capital mobility and a commitment to more fixed exchange rates. In order to get a relative indicator I have measured the change in the money base as a percentage of each country's GDP. The result for the four Nordic countries

is shown in Figure 1 below.

Figure 1 should be read with some caution. In recent years there has been a spurt of seigniorage activity in three of the four Nordic countries. This does not necessarily contradict our expectations, as fixed exchange rate bonds were broken during this period. While the volatility in the Danish case is puzzling (as they have managed - by and large--to maintain their fixed rate commitment, especially in the second EMS stage), it is not difficult to see that the 1992 market-forced float of the Finnish and Swedish currencies has once again opened up these countries' seigniorage gates. The gradual decline in Norway's potential seigniorage revenues is in line with our expectations.

Generally, then, we can expect that seigniorage revenues will continue to decline as the Nordic commitment to fixed exchange rates solidifies. As Norway has traditionally relied more heavily on these resources, it has

the most to lose in the transition.<sup>9</sup> Finland, though it began to exploit this revenue source more actively in the 1980s, has the least to lose. Thus, we might sum up this section by suggesting that the potential for seigniorage revenues appears to be decreasing over time, but the effect that this will have on the Nordic countries varies significantly.

If the potential for seigniorage revenues and surprise inflation appears to be insignificant or declining over time, we are still left with two alternative means to finance a fiscal expansion: one tax based, the other bond-financed. As it is in these areas that we might expect the room for maneuverability to increase, let us turn to them now.

### *Taxes*

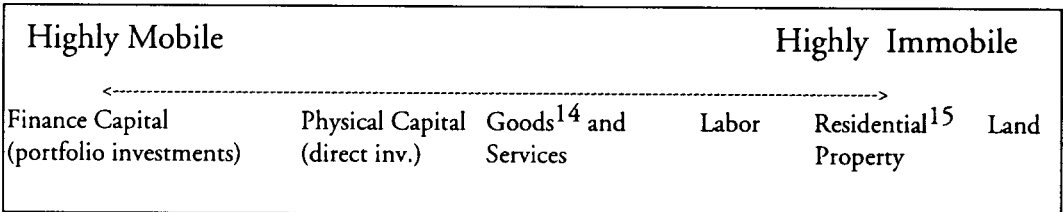
In an environment with free capital mobility, one might expect that capital - by its very ability to move - could undermine international tax regimes. This, in turn, has the potential to restrict the possibility of social democratic states to fund their full-employment programs. Indeed, there is good theoretical justifications for this argument. Stiglitz (1983), for example, has shown that well-functioning capital markets make it possible to avoid paying taxes altogether by clever exploitation of asymmetries in the tax treatment of capital gains on long and short asset holdings; and Giovannini (1989) has shown how a world with free capital mobility facilitates the possibilities for international tax arbitrage.

This tendency is also suggested by a number of empirical and anecdotal exam-

ples. Reductions in top marginal corporate and income tax rates have occurred in nearly every OECD country over the last decade (OECD 1989), and have been well documented. Sweden, for example, has lowered its top marginal rates for corporations from 56 to 30% and its top marginal rate for individuals from 82 to 50% (Steinmo 1993: chapter 6). There have also been several cases of political threat-making/bullying by capital in the Nordic countries in the run-up to the EU referendum, and the recent Swedish parliamentary elections. In Sweden, the chiefs of Sweden's four top exporting companies threatened to withdraw their domestic investments (totalling about 50 billion SEK/year) in Sweden if income tax levels in Sweden were changed after the election.<sup>11</sup> Thus, anecdotal evidence suggests that without tax harmonization, the threat of capital mobility might be quite large in the Nordic countries.<sup>12</sup>

The argument for international tax convergence is based upon the ability of capital to escape a single country's tax by moving abroad. If we recognize that there are different levels of mobility for different forms of capital, we can begin to form some expectations about the sort of tax-revenue bases which would be in jeopardy given international economic integration. In order to do this, we need to try and rank different capital bases according to their potential for mobility. The continuum below is an attempt to do this.<sup>13</sup>

From this linear depiction, we might expect international tax harmonizati-



on among taxes on those capital bases which are located toward the left-hand pole of the continuum: personal and corporate taxes, as well as indirect taxes on goods and services. Governments should be able to maintain some degree of taxing autonomy on those bases which lean toward the right side of the continuum. Indeed, the fear of this sort of tax harmonization has led to the development of international taxation regimes which have been devised to prevent some of the problems associated with income and commodity taxes based on the source/origin principle. Without international cooperation, one could imagine the development of a downward tax "race" between nations in an attempt to attract resources and trade.<sup>16</sup>

In practice, however, countries are not able to coordinate their tax policies in such an optimal manner. For example, there remain serious obstacles to enforcing the worldwide income tax principle.<sup>17</sup> As it is relatively unlikely that these practical problems can be overcome, income tax systems

will retain important characteristics of a source-based tax,<sup>18</sup> and mobile capital will thus be sensitive to tax differentials. Thus, in practice we can expect international tax harmonization in those areas where capital is most mobile: personal and corporate capital taxes.

But the indirect tax base might also be susceptible to harmonization. The destination-based indirect tax system relies in large part on border controls to insure that taxes are levied on all imports, and that exports are allowed to leave the country free of tax. As border controls are eliminated (via the European Economic Area - EEA, for example), new means for employing indirect taxes will need to be developed, or indirect tax rates will eventually be harmonized by competition.

As there appears to be good theoretical justification for expecting tax harmonization in those areas where capital is potentially more mobile, it might be worthwhile to investigate empirically if there has been any

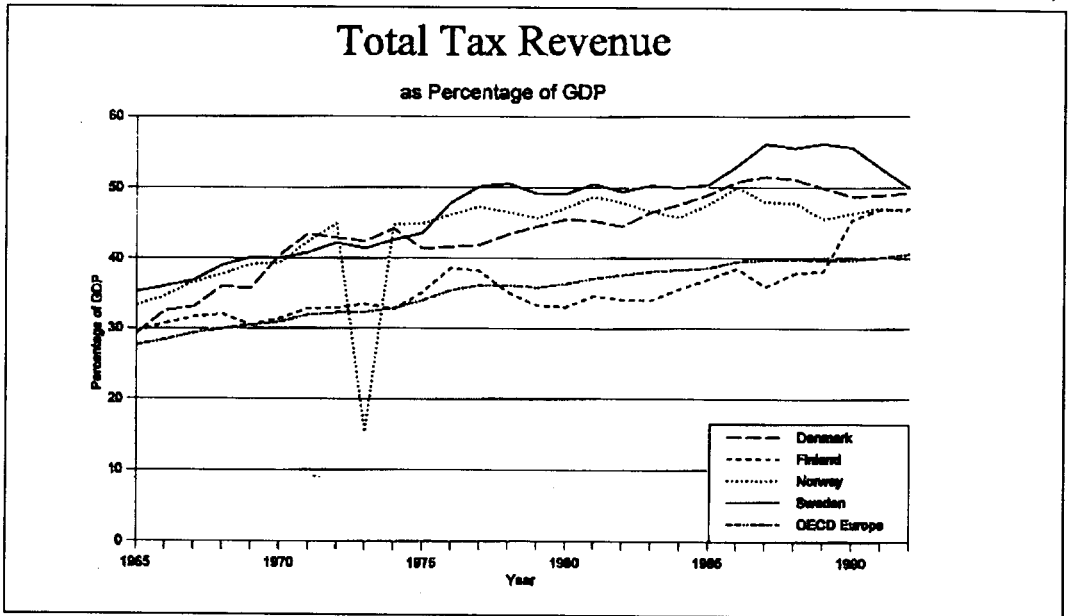


Figure 2 -Source: OECD (1991,1994: Table 3)

motion in that direction.<sup>19</sup> Figures 2 through 6, below, attempt to do this for the period 1965-1992.<sup>20</sup> We should expect that there would be some harmonization in taxes on personal and corporate income, as well as a convergence of indirect taxes on goods and services. Alternatively, we should expect to see a continuation of diverse levels of property taxes.

In fact, just the opposite seems to be occurring. Figure 2, which compares total tax revenue as a percentage of GDP for the Nordic countries and the OECD/European average, suggests that--far from any sort of tax harmonization--there appears to be a tendency toward dispersion among the cases under consideration! Not only has the distance among Nordic country tax revenues increased since 1965, but Denmark's divergence, until very recently, was the largest of all! As Denmark is a member of the European Union, has the longest experience with liberalized capital markets, and has maintained the tightest fixed exchange rate regime, we would expect that Danish taxes would be more likely to converge with those in the OECD/European average. In the last couple of years there appears to be some convergence of Nordic tax revenue levels, but they are still much higher than the OECD/European average.

To insure that this diversion cannot be explained by resistance to harmonization in capital bases which are immobile, I have broken up the tax revenues into their contingent parts to measure the degree to which dispersion can be found among the more immobile tax bases. Figures 3 through 6 are the result.<sup>21</sup> These results are equally surprising.

Taxes on personal income, if anything, have increased in spread among the Nordic countries and compared to the

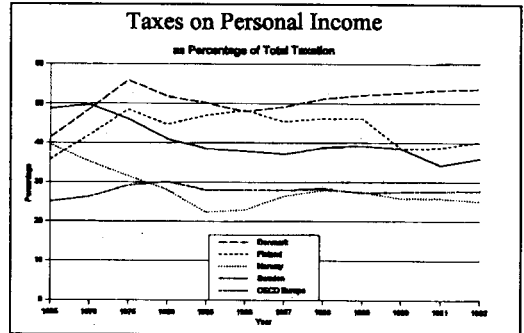


Figure 3 -Source: OECD (1991, 1994: Table 11)

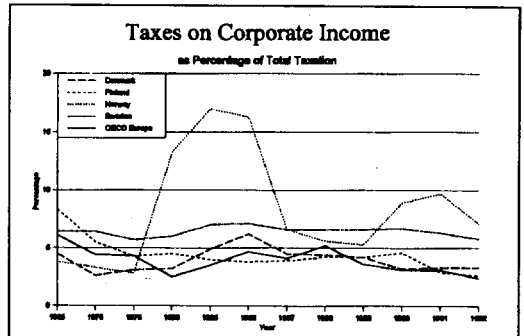


Figure 4 -Source: OECD (1991, 1994: Table 13)

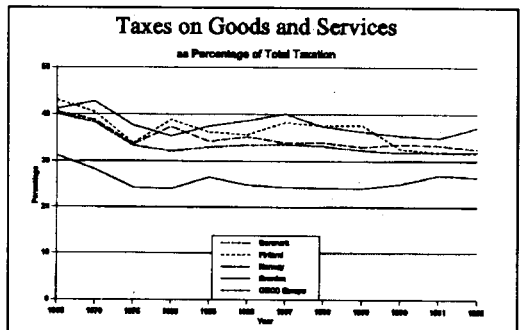


Figure 5 -Source: OECD (1991, 1994: Table 25)

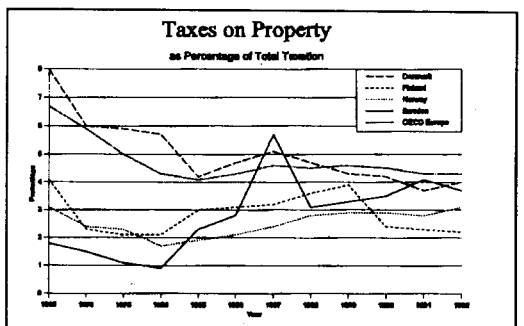


Figure 6 -Source: OECD (1991, 1994: Table 23)

OECD/Europe average (Figure 3). The spread of taxes on corporate income have remained relatively steady over the period, though Norway's corporate taxes diverged significantly in the interim (Figure 4).<sup>22</sup> Indeed, while there was a greater tendency toward corporate tax diversity in the early and mid-1980s (and that tendency has receded in more recent years) the divergence itself was not very significant. Norway's two peculiar strays from the fold do, however, suggest that there was little harmonization pressure on corporate tax incomes.

In recent years there does appear to be a harmonization of taxes on goods and services, and this might be explained by the new EEA trading regime, combined with freer capital mobility and fixed exchange rates (Figure 5). The Danish divergence from the OECD/Europe average, however, is quite peculiar in this regard. If there was some harmonization pressure one might expect to see it pushing harder in the Danish case than in any of the others. Thus, it is difficult to draw

certain conclusions about the pressure for harmonization of taxes in those areas where capital is most mobile. The picture becomes all the more complicated when we look at Figure 6, which compares property taxes among the Nordic countries and the OECD/Europe average. In this area, we should expect no tendency toward tax harmonization, and yet there seems to be a clear empirical tendency in that direction.

Together, Figures 2-6 suggest that there still appears to be some realm of autonomy in which officials can employ national taxing schedules, despite our theoretical expectations and the anecdotal examples to the contrary. What is significant, from the revenue perspective, is that the personal income and the goods-services tax revenues are the most important contributors to Nordic government coffers. Whereas the strongest convergence is in an area of relatively little importance (property tax revenues account for approximately 2% of GNP, compared to the - roughly - 25% farmed by per-

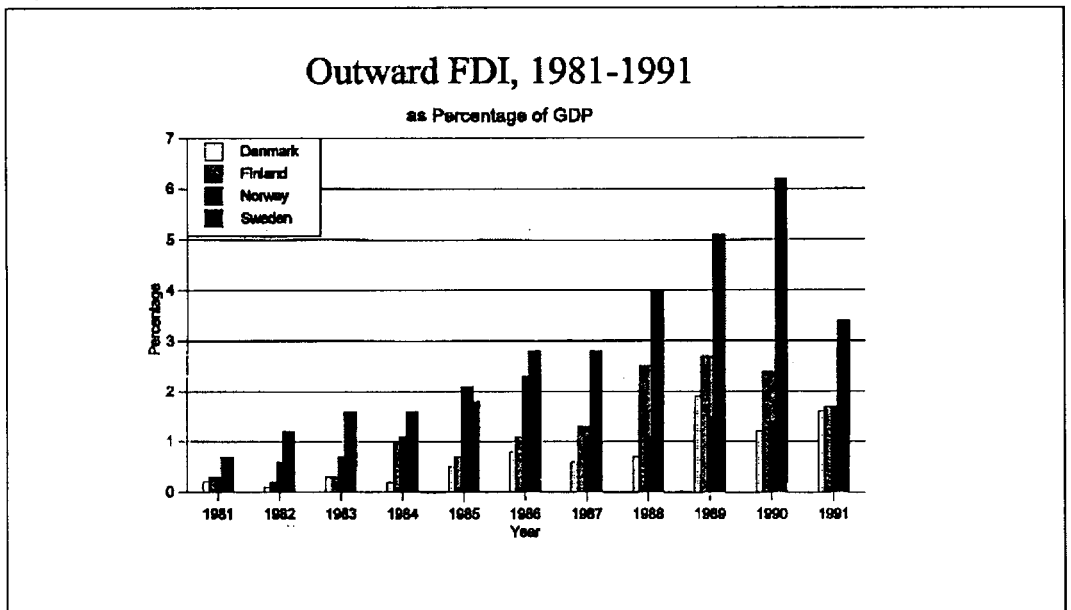


Figure 7 -Source: OECD (1993:15)



sonal income taxes), the convergence in goods-services revenues could be worrying and will have significant effects on the government budget.

That convergence appears to be the case in some of the less mobile tax realms, given our theoretical priors, suggests that the difficulty with obtaining consensus among officials about the implementation of both worldwide and destination taxing principles has been exaggerated; that there remains some serious problems with the theoretical foundations from which we are working--at least in the realm of taxation possibilities;<sup>23</sup> and/or that the taxation schedules still require harmonization, but that capital is taking flight from higher tax regions as a consequence.

This latter possibility seems to be confirmed by the data on outward foreign direct investment flows from the Nordic countries. Figure 7 maps Nordic FDI outflows as a percentage of GDP for the period 1981-1991. Although the trend seems to have peaked for Finland and Sweden (the two biggest losers) in the late 1980s, the Norwegian and Danish capital continued (largely) to take flight throughout the whole period.<sup>24</sup>

Before moving on to the last avenue for funding fiscal policy, we might mention that there has been a great deal of tax reform in all of the OECD countries, and that there are political and social consequences of this streamlining which reach beyond the ability of a country to fund its fiscal ambitions, whatever the impetus for this harmonization and streamlining. In particular, Miller (1986) has emphasized the fact that tax considerations have been the main driving force behind financial innovations. In Sweden, for example, the removal of a tax is credited with triggering the growth of the domestic money

market. This money market further facilitated the circumvention of other regulations, which in turn led to greater deregulation (Englund 1990:386). Thus, tax reforms and liberalization, though they might not have led to a harmonization of European tax rates, may have influenced policy autonomy in other areas (e.g., monetary policy).

In the Nordic context, these resultant changes have had an enormous impact on domestic market institutions, as well as the social environment which both encompasses, and is affected by, them. Prior to liberalization, Nordic private financial markets were very underdeveloped. Credit supplies and prices were the responsibility of elected officials, not market forces. To the extent that markets, not political officials, are now calling the shots, the institutional and social repercussions of these changes are quite significant.

### *Debt*

We are left with the ability of a government to finance its fiscal ambitions by borrowing. This is peculiar for the social democracies, who have tended to rely more heavily on taxation, less on borrowing, to finance their social programs. Indeed, throughout most of the post-war era, the Nordic countries have refrained from building up large government deficits, fearing the inflationary consequences that might result from an overheated labor market. Fiscal policies, in general, were kept tight to dampen inflationary consequences.

With the move to freer capital mobility and the loss of monetary policy options, the Nordic countries have had to rely more heavily on debt-financing. Theoretically, the possibilities for financing should increase in an international market; "crowding out" difficulties should evaporate.

That this is the case in actuality seems fairly obvious--so many countries are currently building up large debts as a means to try and spend their way out of the current deep recession. The more pertinent question for this forum is, what cost must social democracies pay for their fiscal ambitions, and is there a market bias against funding the social agenda?

This is not an easy question to answer, but I will try and capture some of the possible dilemmas by looking at two potential constraints to debt-financed fiscal expansion: the "normative" and the current account constraints. Both constraints, if they exist, are difficult to capture empirically as they concern market perceptions of a national policy's credibility. Thus, this section will need to rely on more anecdotal and comparative evidence to make its point.

Generally speaking, a small open economy with a fixed exchange rate can expect to pay a higher risk premium for its loans than either the larger economies, or those small economies that might be participating in a monetary union. The reason for this is clear. When a sovereign country issues debt denominated in its own currency, the interest rate it will have to pay reflects a risk premium consisting of two components: the risk of default and the risk that a country will devalue in the future.<sup>25</sup> The second risk can be eliminated by issuing debt in a foreign currency; but this option will not be considered here.<sup>26</sup> Obviously, the risk can also be diminished by joining a monetary union. But for small open economies, especially those with a history of devaluations, the risk premium associated with the likelihood of future devaluations can be crippling.

The second part of the risk premium is the default risk, i.e., the probability that the issuing government may not fully

service its debt in the future. In a monetary union, the probability of debt default is lowered by the likelihood of a bail-out by other members of the union. This likelihood tends to give an incentive for member nations to issue unsustainable amounts of debt. That this is seen as a potentially large problem is evidenced by the important role played by the so-called "moral hazard" problem in the Delors Committee proposal to impose strict rules on the size of union-member governmental budget deficits. In the scenario considered in this paper, bail-out is not an option; small open economies will most likely have to pay higher interest rates on their loans to cover the potential risk of default, and of devaluation. This higher risk premium will, on the margins, limit the affordability of debt-financed fiscal expansions.

But there may be constraints beyond the simple risk premiums outlined above. If we try to discount the likelihood of default and devaluation, what other types of premiums might the market demand? The following sections look at the possibility that investors may expect a premium for social policies funded by international borrowing. These constraints might come in two forms: a normative and/or a current account constraint.

#### *Normative constraints*

One way to conceptualize the normative constraint is to put ourselves in the shoes of an investor with an international portfolio. Social democracies, in a world with international capital, now have to sell their policies to a more finicky international investor: an investor with several investment opportunities.<sup>27</sup> Such investors might be leery of public sector growth and egalitarian/ universalistic social policies. On the flip side, one can ima-

gine looking at the options now available to (previously) domestic investors. Thus, as Bredenkamp and Deppler (1990:362) suggest, "...since domestic residents will face increased possibilities for placing their savings abroad, governments may end up having to compete for funds on the basis of a sound fiscal reputation."

Another element of the normative constraint, more familiar to students of less developed economies, is the issue of credit-rationing. Unlike most other markets, international financial lenders control both the supply and the price of the capital it sells to borrowers. As a result of incomplete information and unreliable enforcement mechanisms, international lenders often ration credit to borrowers. In other words, price spreads are more a reflection of a country's ability to borrow than they are of its creditworthiness. To European observers, the interest rate spread on Italian and Belgian bonds provides clear evidence of this.<sup>28</sup> Thus, while social democratic borrowers do have some control over the price that they pay (by controlling deficit spending, etc.), this control is limited by the potential for credit-rationing by international financial markets (Crawford, 1987).<sup>29</sup>

How can we measure this potential normative constraint? One could begin by checking interest rate levels, the availability of international funds (and the price paid), the international credit ranking<sup>30</sup> of the various countries, etc.. This would be an enormously time-consuming process, and the indicators would capture so much more than the phenomenon in which we are really interested. Thus, I have chosen another path, based on a comparison with similar situations.

One possible way to conceptualize the problem is to look at the potential for

debt-financed fiscal expansion within existing monetary unions. Under these conditions, the likelihood for bail-out is larger, the possibility of devaluation missing; and--as a result--there will be a much lower risk premium placed on an individual state's ability to finance its fiscal ambitions. Thus, whatever variation we see might be said to reflect issues of normative credibility, rather than risk as defined above.

Previous work on this issue is inconclusive. Lamfalussy's (1989) appendix to the Delors' Report looks at how much fiscal discipline was required among states/provinces/länder in monetary unions in order to make the union function more smoothly. He concludes that local governments, generally, have not been particularly undisciplined. If Lamfalussy is correct, it would appear that the normative constraint is rather small. But the bulk, albeit not all, of the evidence seems to point in the opposite direction. As Bredenkamp and Deppler (1990: 363) summarized,

"Indeed, juxtaposition of the evidence on the finances of the federated states cited in the Delors Report with that of the finances and inflation performance of nation-states presented in the IMF's International Financial Statistics, if anything, that *fiscal prudence is inversely proportional to the authorities' leverage over monetary policy, that is, their access to the inflation tax*" [emphasis added].

As leverage over monetary policy has already been dealt with in the section above, we might try to reformulate the comparison to bring out the degree to which there is fiscal autonomy among states of a monetary union. Indeed, federal examples of monetary union may be a perfect comparative case for measuring the degree of convergence pressure on small open economies in this new envi-

ronment.

The problem is clearly analogous: federal states face both capital mobility and fixed exchange rate constraints. In this environment we should expect that states, provinces or *länder* (whatever the case may be) would benefit from increased fiscal policy flexibility, as they no longer have access to monetary instruments. Indeed, the potential cost to the national monetary authorities of such deviant federal-state behavior might be so large that we would expect federal regulation to limit the discretion of regional (national) authorities in determining their budgetary positions.<sup>31</sup> With the exception of Australia, however, all of the federal states examined by Lamfalussy have disregarded this option (1989:95). Budgetary policies of the federal-states are left in the hands of the regional (i.e., not federal) authorities. Thus, it seems that either the federal-states all share similar economic objectives and circumstances (highly unlikely); or they are working beneath some unspecified constraint.

Evidence from federal systems suggest that sub-federal regions, despite the lack of federal guidelines, are not prone to fiscal deviance. Even in Lamfalussy's (1989) comparative study,<sup>32</sup> there were - with one exception (Australia) - no apparent medium-term deviations in regional expenditures and deficits. Indeed, with the possible exception of Canada, there have been no large and persistent differences in the fiscal behavior of the member states in various federations.

Neither were there any federally imposed constraints on regional government borrowing. In most of the federal systems, the regional governments have self-imposed constraints on borrowing. In the exception, Australia, the Loan Council in effect sets both an aggregate borrowing limit for all government levels, and decides on its distri-

bution among the states. But in both Germany and the US, states (excepting Connecticut) have self-imposed borrowing restrictions. These are generally in the form of qualified balanced-budget amendments, ceilings on borrowing, and/or as a limitation of borrowing for investment purposes (Lamfalussy 1989: 104).

The fact that these constitutional limits on state (and *länder*) budget deficits are self-imposed is significant. One interpretation of this is that these self-imposed constraints are an attempt to increase both the reputation and creditworthiness of individual states (in the eyes of the relevant capital markets) in an attempt to reduce their cost of borrowing.<sup>33</sup> Note, however, that the risks associated with devaluation and default are largely missing in these circumstances--the market's cover is being demanded for some other characteristic.<sup>34</sup> If this is the case, the incentive for small open economies, in a similar environment cannot be much different. Arguably, as the risk premiums paid by these economies are likely to be larger (given the greater propensity to devalue, and the smaller likelihood of bail-out), the incentives for self-imposed limits to budget deficits might be quite large indeed.<sup>35</sup>

Thus, governments may find it necessary to accept constraints on their fiscal policy as an investment in credibility. That these sorts of consideration play an important role can be seen in the degree to which states in federations find it necessary to self-impose lending constraints, despite the fact that they are not susceptible to the most common elements of risk associated with either firm or nation-state borrowing. In order to avoid large market cover for deviant finance policy, federal-states have found it necessary to bind themselves to rigid budgetary rules. This can be called the normative con-

straint on small open economies. The other credibility constraint facing small open economies that we will address is one which is associated with a nation's current account balance.

#### *Current Account Constraint*

In order to understand how a current account constraint may effect a nation's ability to employ autonomous fiscal policies, it is first necessary to investigate the relationship between the two. In its most basic guise, the relationship can be formulated in terms of the "twin-deficit hypothesis"; i.e., that changes in the budget deficit of the government automatically translate into a corresponding current account deficit. Among the

more sophisticated measures are those which employ versions of the Mundell-Fleming model (Genberg and Swoboda 1992) or models which assume fixed output prices and examine changes along separate exchange-rate and output level schedules (the so-called DD-AA model--see Krugman and Obstfeld, 1991: chapter 16).

These models assume perfect capital mobility and fixed exchange rate expectations so that the domestic rate of interest is determined (exogenously) abroad. Thus, the money-market equilibrium determines the equilibrium output level--independent of aggregate demand. Interest rates imply a given level of investment, which (combined with the income level given by the money

**Table 1**  
**Nordic National Investment and Savings Rates**  
(in millions of national currencies)

	Sweden		Norway		Denmark		Finland	
	Investmt.	Savings	Investmt.	Savings	Investmt.	Savings	Investmt.	Savings
1980	106,427	30,010	70,798	42,992	70,312	21,858	48,703	21,454
1981	109,397	18,755	91,793	48,442	63,817	12,708	54,728	21,676
1982	118,089	9,894	92,262	45,210	74,614	13,400	61,647	20,959
1983	132,296	22,824	103,448	54,145	82,049	21,731	69,546	21,369
1984	148,792	42,771	117,567	77,681	97,252	35,364	73,010	27,929
1985	166,980	41,847	110,042	81,316	115,192	37,109	79,423	27,180
1986	175,503	53,383	145,540	45,605	138,370	49,571	82,908	26,575
1987	197,948	58,510	157,363	47,944	138,033	50,755	92,541	28,351
1988	225,105	66,900	170,345	41,416	132,226	56,508	109,258	40,981
1989	271,000	77,592	169,485	56,130	138,953	60,394	136,148	48,998
1990	292,525	63,965	124,416	60,496	139,357	70,419	139,144	38,888
1991	280,371	39,354	127,053	59,709	135,967	68,933	110,061	-8,294
1992	244,703	9,216	134,280	41,593	129,424	75,744	87,601	-24,413

Source: OBCD (1994)

Notes: The proxy for investment levels is "Gross fixed capital formation at current prices"<sup>11</sup>. National savings, here, are defined as the national disposable income less final consumption; or line 15 under "Relations among National Accounting Aggregates".

stock) determine the level of private savings. In this way, variations in government spending--financed by borrowing--will deliver one-to-one changes in the current account balance (Genberg and Swoboda 1992: 356).<sup>38</sup> Or, in more simple terms, expansionary fiscal policies will reduce the current account balance.

Market actors (and voters) who are aware of this relationship might then interpret a current account deficit as a clear signal for: 1) an economy which is either experiencing excess demand or underlying inflationary pressures; 2) a reflection of future pressures on the (future) exchange rate; or 3) simply, a country living beyond its means. If a current account deficit becomes an easy symbol for these (largely negative) tendencies in the economy, we might expect policy-makers to focus on keeping the current account above balance, and pursue fiscal policies accordingly (Bredenkamp and Deppler 1990: 357).<sup>39</sup>

That policy-makers are actually

doing this has been used to explain the peculiar relationship between a nation's national savings and investment rates. Bayoumi (1989) suggests that governments find it necessary to adjust their policies in an attempt to minimize the gap between national saving and investment rates. This is a novel argument based on the fact that there is no reason for these two indicators to be correlated, given free capital mobility. Bayoumi's argument is that the current account needs to be held above balance (or some other floor) in order to signal a healthy investment environment to international investors.

As a first, rough, swipe at this argument I have collected data on investment and savings rates in the four Nordic countries; these are shown in Table 1. If Bayoumi's argument is correct, and the Nordic countries are working underneath a current account constraint, then one of the things that we should expect to see is a degree of co-variability between the national investment and

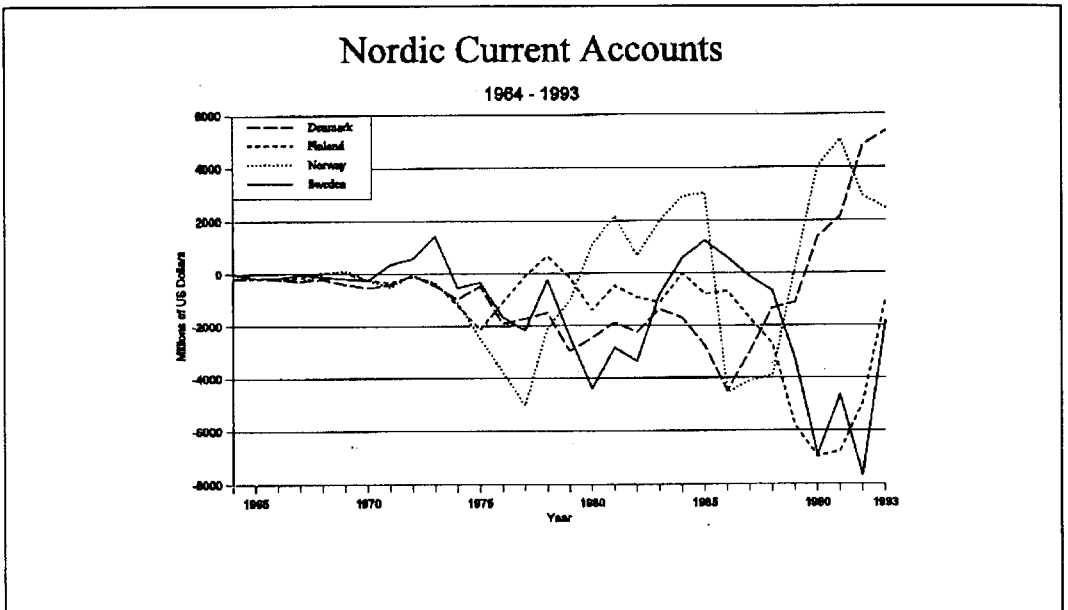


Figure 8 -Source: IMF (1994: line 77ad)

savings rates. How much variability is required is difficult to measure; and I have not yet attempted to quantify it. But simple observation suggests that the relationship holds stronger for Sweden, Finland and Denmark (where both indicators rise until the late-1980s, then begin to drop off), than it does for Norway. Although in the latter country the relationship is not all that weak. Generally, similar trends are evident in all four countries--though it appears to be weaker in the latter period.

As a second swipe, we need to take a look at how frequently the current account was actually held in balance. After all, it is important to see if governments are using their fiscal instruments to maintain a current account balance; and if they are, how effective have they been in this regard?

Figure 8 suggests that Nordic current accounts, until the mid-1980s, were held largely in tact. The timing is not surprising, as it corresponds to the liberalization of Nordic foreign exchange markets. Together with the savings and investment figures, there appears to be some support for suggesting that fiscal policy might have been constrained by considerations of keeping the current account in balance. But the relationship is so weak, and the possible determinants so many, that it is not possible to make any conclusive remarks about the relationship. The fact that the savings and investment relationship appears to have held even after the foreign exchange deregulation in the mid-1980s suggests that there may be some truth to the relationship. On the other hand, there are so many other possible determinants to both the savings/investment ratio and the current account position, that the evidence here is highly inconclusive.

Thus, in terms of credibility constraints, there seems to be suggestive compa-

rative evidence that some sort of normative constraint may be adding to the cost of social democracies to finance their fiscal ambitions. The evidence for a current account constraint is weaker, but does not refute the hypothesis. In both cases, however, more empirical work and testing is necessary.

### Conclusion

What have we learned from this first swipe through the empirical data on the Nordic countries? Is there an effective constraint on Nordic fiscal policies, despite initial expectations to the contrary? Generally, the answer must be a qualified no. Considering that the surrogate indicators are quite rough and the theoretical work in the area is rather undeveloped, the data is still quite inconclusive about the possible constraints on small open economies to finance their fiscal policy ambitions.

As none of the countries were heavily reliant on either seigniorage or surprise inflation incomes in previous periods, there is relatively little lost in the move to an economic environment which discourages these two revenue generators. Of the Nordic countries, Norway benefited the most from seigniorage revenues, but they represented a relatively small proportion of the government's revenue pot. Surprise inflation, in terms of income generation, does not appear to have been a significant instrument for the Nordic social democracies.

Neither does there appear to be any constraint placed on the Nordic countries' ability to finance their policy ambitions with autonomous tax regimes--despite the anecdotal evidence to the contrary. Overall tax revenues do not appear to be harmonizing among the Nordic and European states. Harmonization, when it does occur, is happening in the most unexpected areas, on the

most immobile factor: property. Our data, however, may be misleading in at least one regard, as tax rate differentials may be maintained by capital flight.

If there are constraints on Nordic fiscal policy ambitions, they are most likely to be found in the degree to which purchasers for Nordic bonds are now more finicky, more international, and more speculative than was the case in the golden age of social democracy. In addition to the structural (and very real) constraint imposed by Domar's Law, comparative evidence from existing monetary unions suggest that the market may encourage states to self-impose constraints in the form of balanced-budget amendments, aggregate borrowing limits and the like. In addition, of course, small open economies must pay for the potential risk of devaluation and/or default. This price, at times, can be very constraining. As this paper represents just a first swipe at the data, its conclusions must be tempered.

While the market constraints on fiscal policy do not appear to be overwhelming, the institutional consequences of these changes are indeed damning. One cannot exaggerate the distributional and social consequences of a change from politically-motivated credit allocations to more market-oriented allocations. As a direct result of liberalization, the institutional framework traditionally used by Nordic social democracies to actively steer their national economies has been undermined. Arguably, efficiency has replaced justice as the guiding principle of allocation. Though fiscal instruments remain, and tax-based and bond-financed funding for them is still possible (if somewhat costly), the surrounding institutional framework has changed radically.

Also significant is the changed nature of how social democratic policies must be

funded. There has been important changes in that all of the Nordic states have become more reliant on borrowing--though Norway does so to a lesser degree. The reasons for this switch appear to be less the result of constraints on the fiscal side of the government's policy instruments, and more the result of the lack of additional instruments. In other words, the problem is not so much that the realm of fiscal policy autonomy has shrunk--the evidence presented here suggests that there has been little perceivable change in that regard. Rather, the decline of other (particularly monetary) instruments has left more work for the fiscal policies which remain. With no additional instruments to try and repair the national economic condition, the fiscal tool becomes strained.

In short, then, there does not appear to be significant perceivable constraints on a small open economy's ability to finance its fiscal policy ambitions in a world with free capital mobility and fixed exchange rates. Our theoretical priors have held up well under empirical investigation. The problem appears to be that over-burdened fiscal policies cannot hope to fill the void which has been made with the decreased utility of monetary policy instruments.

#### References

- Bayoumi, Tamim. 1989. "Saving-Investment Correlations: Immobile Capital, Government Policy or Endogenous Behaviour?" *International Monetary Fund Working Paper WP/89/66* (Washington: IMF).
- Bredenkamp, Hugh and Michael Deppler. 1990. "Fiscal Constraints of a Fixed Exchange Rate Regime," in Victor Argy and Paul De Grauwe (eds), *Choosing an Exchange Rate Regime: The Challenge for Smaller Industrial Countries* (Washington DC: IMF): 350-373.
- Corsetti, Giancarlo and Nouriel Roubini. 1992. "Tax Smoothing Discretion versus Balanced Budget Rules in the Presence of Politically Motivated Fiscal Deficits: The Design of Optimal Fiscal Rules for Europe after



- 1992." CEPR Discussion Paper. No.682 (August).
- Crawford, Vincent P. 1987. "International Lending, Long-Term Credit Relationships, and Dynamic Contract Theory." *Princeton Studies in International Finance*. No. 59 (March).
- Danish Economic Council. 1989. *The Danish Economy* (May).
- Danmarks Nationalbank. 1994. *Statens Låntagning og Gæld 1993*. (Copenhagen: Danmarks Nationalbank).
- De Grauwe, Paul. 1990. "Fiscal Discipline in Monetary Unions." CEPS Working Document No.50 (November).
- Domar, Eversy D. 1944. "The 'Burden of the Debt' and the National Income." *American Economic Review* 34: 798-827.
- Englund, Peter. 1990. "Financial Deregulation in Sweden." *European Economic Review* 34: 385-393.
- Fischer, S. 1983. "Seigniorage and Fixed Exchange Rates," in P. Aspe, R. Dornbusch and M. Obstfeld (eds), *Developing Countries in the World Financial Market* (Chicago: Chicago University Press).
- Frieden, Jeffrey. 1991. *Debt, Development and Democracy* (Princeton: Princeton University Press).
- Genberg, Hans and Alexander K. Swoboda. 1992. "Saving, Investment and the Current Account." *Scandinavian Journal of Economics* 94 (2): 347-366.
- Giavazzi, F. and A. Giovannini. 1989. *Limiting Exchange Rate Flexibility: The European Monetary System* (Cambridge: MIT Press).
- Giovannini, A. 1989. "National Tax Systems vs. the European Capital Market." *Economic Policy* 9:346-386.
- Goldstein, Morris and Geoffrey Woglom. 1992. "Market-based Fiscal Discipline in Monetary Unions," in Matthew B. Canzoneri, Vittorio Grilli and Paul R. Maason (eds), *Establishing a Central Bank. Issues in Europe and Lessons from the US*. (Cambridge University Press for CEPR): 228-260.
- Graham, George and Andrew Jack. 1994. "US Judges Back California's Unitary Tax System." *Financial Times*. June 21.
- Grilli, V. 1989. "Seigniorage in Europe." in M. de Cecco and A. Givoannini (eds), *A European Central Bank* (Cambridge: Cambridge University Press).
- Hoover, Kevin D. 1988. *The New Classical Macroeconomics* (Cambridge, Mass: Basil Blackwell).
- IMF (International Monetary Fund). 1994. *International Financial Statistics Yearbook (IFS)*. (Washington DC: IMF).
- Ingram, James C. 1973. "The Case for European Monetary Integration." *Essays in International Finance*. No. 98 (Princeton NJ: Princeton University).
- Isachsen, Arne Jon. 1984. "Seigniorage og inflasjons-skatt" in his (ed.) *Penger, kreditt og valuta*. Pp. 38-55.
- Krugman, Paul R. and Maurice Obstfeld. 1991. *International Economics. Theory and Practice*. Second Edition. (NY: Harper Collins).
- Lamfalussy, Alexandre. 1989. "Macro-Coordination of Fiscal Policies in an Economic and Monetary Union in Europe." Annex to the Delors Report, *Report on Economic and Monetary Union in the European Community* (Luxembourg: EC, April 12): 91-125.
- Lønning, Ingunn. 1994. "Default Premia on European Government Debt." *Memorandum from the Department of Economics, University of Oslo* (August). No. 16.
- Miller, M. 1986. "Financial Innovations: The Last Twenty Years and the Next." *Journal of Financial and Quantitative Analysis* 21: 459-471.
- OECD. 1994. *National Accounts. Detailed Tables 1980, 1989, 1991, 1993, 1994* (Paris: OECD).
- Olivera, H.G.J. 1967. "Money, Prices, and Fiscal Lags: A Note on the Dynamics of Inflation." *Banc Nazionale del Lavarò, Quarterly Review*. Vol. 20 (September): 258-267.
- Riksgäldskontoret. 1994. *Statistisk Årsbok 1993. Årgång 73*. (Stockholm: Swedish National Debt Office).
- SSB (Norges Statistisk Sentralbyrå). 1991. *Kredittmarkedstatistikk. Fordringer og gjeld overfor utlandet 1988 og 1989* (Oslo: SSB).
- Steinmo, Sven. 1993. *Taxation and Democracy: Swedish, British and American Approaches to Financing the Modern State* (New Haven: Yale University Press).
- Stiglitz, Joseph. 1983. "Some Aspects of the Taxation

of Capital Gains." *Journal of Public Economics* 21.

Tanzi, V. 1979. "Inflation, Real Tax Revenue, and the Case for Inflationary Finance: Theory with an Application to Argentina." *IMF Staff Papers* Vol.25 (September): 417-451.

----1995. *Taxation in an Integrating World* (Washington DC: Brookings).

von Hagen, Jürgen. 1990. "A Note on the Empirical Effectiveness of Formal Fiscal Restraints". (mimeo), Indiana University (January).

Wallerstein, Michael and Adam Przeworski. 1994. "Capital Taxation with Open Borders." Revised edition of a paper presented at the 1990 Annual Meeting of the APSA.

Central Bank Laws Denmark. 1937. *The National Bank of Denmark*. Act, By-Laws, etc. Copenhagen. (Act No. 116, April 7th, 1936).

Finland. 1984. *Currency Acts and Regulations for the Bank of Finland*. Helsinki.

Norway. 1985. *Lov om Norges Bank og pengevesenet* (sentralbankloven). Lov 1985-05-2428 Finansdepartementet. Oslo.

Sweden, 1988. *Svensk författningssamling* (SFS 1988:1385). "Lag om Sveriges riksbank". (from December 8, 1988). Stockholm.

## Notes

<sup>1</sup>It should be noted that there is not agreement among macroeconomic theorists about the feasibility of fiscal policies in general. Indeed, it seems a recurring monetarist claim that fiscal policy is relatively unimportant. In this paper I will address neither the monetarist claims, nor those of the neo-classical assumptions about the microeconomic linkages among government spending, debt and tax policies. They too assume that active fiscal policy is less useful than generally acknowledged. For a description and critique of these models, see Hoover (1988: chapter 7). It is my intent to find the potential constraints on fiscal policy within the framework of a theoretical tradition which recognizes the utility of the policies, in hopes of trying to create greater latitude for fiscal policy in the future.

<sup>2</sup>There is an additional, fourth, constraint which is of a more structural nature: Domar's Law. Unfortunately, there will not be space to discuss this important constraint. Briefly, however, it can be described as follows. When a country's real interest rates rise above its real

growth rate (and thus above the growth of taxable income), the escalation of debt service must progressively limit a country's fiscal maneuverability. All of the Nordic countries face this constraint as the (currently shrinking) room for fiscal maneuverability is determined largely by the world's real interest rates.

<sup>3</sup>On the other hand, if there are collection lags in the tax system, inflation may actually reduce real fiscal revenues (i.e., the so-called Olivera-Tanzi effect). This paper will not consider these effects.

<sup>4</sup>One exception to this consensus is Gros (1988), who shows how even the incentive to use surprise inflation as a revenue source can have important implications. My investigatory work in this area has shown that Nordic surprise inflation revenues do not appear to have been significant in the period before free capital mobility and fixed exchange rates. Correlations between devaluations (as a surrogate indicator for surprise inflation) and tax revenues did not prove to be significant. Nor did these countries (earlier) run large public debts, where recourse to surprise inflation revenues would have been more attractive.

<sup>5</sup>Each of the four Nordic central bank laws allows for seigniorage revenues to be returned to the government/parliament after the requisite reserve funds have been replenished (at varying levels). See the central bank laws for Sweden (§ 49), Denmark (§19), Finland (§30) and Norway (Chapter VI, #28).

<sup>6</sup>I have employed a simplified version of the *cash-flow* measure of seigniorage. This is the measure commonly applied in practice (Fischer (1983), Grilli (1989), Giavazzi and Giovannini (1989), and Gros (1989)), where seigniorage is measured by the ratio of the rise in the stock of currency in circulation over the year to nominal GDP. This cash-flow concept of seigniorage gives the increase in public debt that would occur if no monetary financing of government expenditures were available under the assumption of an unchanged fiscal deficit. This concept can be applied as a proxy for actual seigniorage flows to the government on the assumption that the central bank is not independent, and that the government therefore receives the seigniorage indicated by the change in the monetary base. While these assumptions might not be warranted for Germany, they are not unreasonable for applications concerning the Nordic countries during the period under consideration. Gros (1992) has developed a more complicated *opportunity cost* measure of sovereignty which might be employed in future studies.

<sup>7</sup>Gros (1989), for example, does this by looking at the effects of EMS and financial market integration together, concluding that only Portugal and Greece might experience substantial seigniorage losses.

<sup>9</sup>For an overview of the different ways to measure seigniorage, and its relative importance in Norway during the 1970s, see Isachsen (1984).

<sup>10</sup>The four were Sören Gyll, chief executive of Volvo; Lars Ramqvist, chief executive of Ericsson; Bert-Olof Svanholm, chief executive of Swedish ABB; and Bo Berggren, chairman of Stora. Their threat came by way of an open editorial in the *Dagens Nyheter* (September 12, 1994).

<sup>11</sup>This is supported by Tanzi's (1995) frequent references to the fact that small open economies are particularly hampered by the threat of capital flight.

<sup>12</sup>This continuum is informed by chapter four of the Danish Economic Council (1989).

<sup>13</sup>It is obviously debatable whether physical capital is more mobile than tradeable goods. While this is probably not true in the short-run, in the long-run trade barriers can be circumvented via direct foreign investment; the protected foreign market is invaded by establishing production there.

<sup>14</sup>In the short-run, structures are obviously as immobile as the land on which they are built. Over time, however, the international pattern of housing investment will likely be affected by cross-country differentials of taxes on buildings.

<sup>15</sup>In general, two principles have been developed by countries interested in protecting their tax bases: the principle of worldwide income taxation, and the destination principle applied to indirect taxes. The principle of worldwide income taxation takes into account an individual's or corporation's worldwide income as the basis for taxation. To avoid international double taxation, the residence country typically allows a credit for any taxes paid abroad against the taxpayer's domestic tax liability. In this way, the taxpayer should have no (tax) incentive to invest his capital in one jurisdiction or another.

The destination principle is applied to indirect taxes, enabling a country to impose a commodity tax without impairing its competitiveness vis-à-vis other countries. Thus, goods are taxed in the country of final consumption, so that there is no tax discrimination between domestic and foreign goods sold in a given national market.

By a consistent application of both of these principles it should be possible, in theory, for each country to choose its tax rate in accordance with its own preferences without serious threat to its tax base—even in a world of highly international mobile goods, capital and labor.

<sup>16</sup>An example of the problems in enforcing this principle can be clearly seen in the recent conclusion to a seventeen year US Supreme Court battle over the State of California's right to pursue a so-called unitary tax scheme. California introduced this system as a means of stopping companies from avoiding state taxes by rigging their prices for international transactions. The system treats a firm and all of its affiliates as a single unit, so that a firm's tax is calculated on an a proportion

of a company's worldwide income instead of only on income earned in the state. Arguably, the very fact that the State of California has fought so hard for the need to maintain this taxing scheme is evidence of the ability of capital to skirt local taxation authorities.

The State of California was eventually victorious by a 7-2 majority, in which international agents (represented by Barclays Bank of the UK and Colgate-Palmolive of the US) could not demonstrate that the tax discriminated against foreign commerce, or that it imposed an undue compliance burden (see Graham and Jack, 1994).

<sup>17</sup>A source-based tax is one where income is taxed only in the jurisdiction in which it is earned.

<sup>18</sup>For a more detailed description of evolving tax policy in the Nordic countries, see the September 1994 issue of *The Scandinavian Journal of Economics* 96 (3), which is dedicated to tax policy in small open economies.

<sup>19</sup>I have chosen to look at tax revenues, rather than effective top and average rates. I do this because I expect that tax competition will force a dramatic drop in revenues, and therefore in the percent of revenue that the tax generates as well. In addition, there are several other aspects of a nation's tax system which are missed when only rates are compared. Variations in the efficiency of tax administrations, tax bases, the degree of enforcement, etc., are equally important tax influences on investment decisions. See Tanzi (1995:90-122).

<sup>20</sup>I had originally intended to include taxes on payrolls and work-forces, but the cross-national data in this area were much too spotty to give an accurate picture over time.

<sup>21</sup>This is most likely the result of increased oil incomes, not a reflection of a change in Norwegian rates.

<sup>22</sup>The lack of harmonization in income taxes may be the result of investors not expecting future taxes to rise. Wallerstein and Przeworski (1994) argue that governments can collect substantial taxes on uninvested profits without affecting private investment—regardless of whether capital is mobile or not—given that they use the right tax instruments and that taxes are stable.

<sup>23</sup>Obviously, several factors influence capital flows beside changes in tax structure. I do not mean to suggest that other motives are not significant. The point of these figures is simply to show that finance capital is not indifferent to changing (national) economic conditions, and may be provoked to flight given an uncompetitive taxation regime.

<sup>24</sup>An explicit comparison with the risk-costs associated with individual firm borrowing might be useful at this stage. Firms that borrow imprudently face two serious threats to their existence: bankruptcy and liquidation. The market signals this risk by demanding a default premium on top of the usual lending price and/or by

rationing the amount of funds made available. As firms such as this are working within tight (market-determined) constraints (i.e., additional revenues, beyond a certain point, cannot be obtained by simply raising prices--the market will not bear these increases), borrowing and expenditure decisions are responsive to market pressures.

Might we expect the same sort of pressure on a small open economy, with fixed exchange rates in a world with free capital mobility? At least two differences immediately avail themselves. First, bankruptcy and liquidation are not likely outcomes for a country that has pursued an imprudent borrowing strategy. Second, such a country has recourse to additional funding sources that are not available to firms, especially the seignorage option (discussed above).

In other words, should the market demand a risk-premium on its cost to providing credit to an imprudent lender country, the short-run effect on that country's borrowing habit may differ from that of the firm's. In particular, the government of a small open economy may be less responsive (in the short-term) to an increase in the cost of its borrowing, as it has other resources available to it; higher debt service payments might be met by raising taxes and/or by monetizing the deficit. It is only with time that these costs begin to accumulate in a way which makes it difficult for small governments to continue along their deviant path. Over time a government can expect domestic resistance to the implied tax burden, fear of potential crowding out effects, or a higher rate of inflation.

<sup>25</sup>This option, contrary to popular perceptions, is increasingly employed by the Nordic countries. Indeed, Sweden in 1992 floated the largest bond by a sovereign nation (8 billion ECU) in a foreign currency. For the relative size of these foreign denominated loans, see SSB (1991), Danmarks Nationalbank (1994) and Riksgäldskontoret (1994).

<sup>26</sup>This contrasts starkly with the situation under the Golden Age of social democracy, where governments could (and often did) require private domestic financial institutions to purchase state-issued bonds.

<sup>27</sup>Though the Belgium debt is larger than the Italian (140.12 to 123.67% of GNP in 1994), the interest rates that it pays are much smaller (7.76 to 10.59% in 1994). Source: Annual Macroeconomic Data Base, DGII, European Commission, 20 March 1995.

<sup>28</sup>For a useful description of this phenomenon, with references, see Frieden (1991:53-59).

<sup>29</sup>In a comparison of European national bonds (floated in deutschemark), Lønning (1994) finds that national bond differentials are not apparently related to levels of international indebtedness or other macroeconomic fundamentals. Only a nation's credit rating comes out as a significant variable for predicting the variation. If a country's rating is not linked to its

macroeconomic performance, one wonders what factors determine these important signals? Maybe the normative constraint is harbored in the Standard and Poor's?

<sup>30</sup>A tendency toward fiscal expansion by the regional authorities could lead to pressure on the (federal) monetary authorities to adopt a more accommodative monetary policy, which would in turn lead to inflationary pressure.

<sup>31</sup>Lamfalussy compared five federal systems: the United States, the Federal Republic of Germany, Canada, Australia and Switzerland.

<sup>32</sup>See, for example, De Grauwe (1990:4). To the degree that these limits may be ineffective, see von Hagen (1990).

<sup>33</sup>US states have not defaulted in the post-war period (Golstein and Woglom, 1992). Nevertheless, the yields on bonds issued by different states can vary significantly (e.g., 84 basis points in December 1989--see Goldstein and Woglom, 1992) and appear to be *higher* than those among European nation states (Lønning 1994)!

<sup>34</sup>The record in the EMS might also be illustrative. During the period 1979 to 1987, when the EMS was allowing for some flexibility of exchange rates, the economies of European member states were characterized by a divergence of fiscal policies. Several countries had large budget deficits, and in the cases of Italy, Belgium, Ireland, Greece, Portugal and the Netherlands, these budget deficit led to a significant increase in the public debt to GDP ratios.

Since 1987, however, the fiscal balances of a number of these countries have improved, leading to a reduction in the debt to GDP ratios in several of them. Obviously, there could be other important explanations for this change in behavior, including the 1989 Delors Report (which recommended the imposition of binding fiscal rules to limit policy-makers' discretion), but the effect of increasingly fixed rates of exchange in a world with relatively free capital mobility should not be underestimated.

(The eventual language of the Maastricht Treaty was much weaker on this issue than was the original Delors Report. There was wide debate among members as to the desirability of strict limits on budget deficit sizes. Eventually, the Maastricht Treaty ratified the strict guidelines, but established a rather mild set of sanctions against off-target countries. For a description of the sanction procedure, see Corsetti and Roubini (1992: 3f)).

<sup>35</sup>Several of the models' inherent assumptions can be challenged, and the posited relationship is controversial. There are, after all, static formulations of current account developments which rely on accounting identities (e.g., the elasticity, the income-absorption, the saving-investment, and the monetary approaches);

terms of trade and exchange rate developments, etc.. See Genberg and Swoboda (1992) for a survey of the various approaches.

<sup>36</sup>The alternative view is that the current account can be affected by a host of other factors as well (e.g., shifts of the productivity of capital or labor, demographics, portfolio preferences, etc.) that bear no simple relationship to the interpretations posited. As Ingram (1973) has argued, it is not clear that an investment-induced deterioration in the current account is necessarily inflationary; nor does it have any clear implications for long-run solvency or national wealth. Bredenkamp and Deppler (1990) are suspicious of the external balance argument, but realize that it might be important in credibility terms during the transitional stage to irrevocably fixed rates of exchange.