Sinn, Hans-Werner; Ochel, Wolfgang

Working Paper

Social Union, Convergence and Migration

CESifo Working Paper, No. 961

Provided in Cooperation with:
Ifo Institute – Leibniz Institute for Economic Research at the University of Munich

Suggested Citation: Sinn, Hans-Werner; Ochel, Wolfgang (2003) : Social Union, Convergence and Migration, CESifo Working Paper, No. 961, Center for Economic Studies and Ifo Institute (CESifo), Munich

This Version is available at:
http://hdl.handle.net/10419/76389

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

www.econstor.eu
SOCIAL UNION, CONVERGENCE AND MIGRATION

Abstract

The forces of the market and systems competition bring about economic and social convergence in Europe. There is no need for social policies at the EU level. Social harmonisation would distort migration flows and slow down the speed of economic convergence. National welfare states will be threatened by the free migration of people in Europe. The race to the bottom is a serious risk. However, to contain this risk, neither harmonisation of welfare payments nor constraints on migration are needed. The adoption of the principle of selectively delayed integration is the better alternative.

JEL Code: I38, J61, O52.

Hans-Werner Sinn
Ifö Institute for Economic Research
Poschingerstr. 5
81679 Munich
Germany
Sinn@ifo.de

Wolfgang Ochel
Ifö Institute for Economic Research
Poschingerstr. 5
81679 Munich
Germany
Ochel@ifo.de
SOCIAL UNION, CONVERGENCE AND MIGRATION

I Introduction

The convergence of living conditions and of social standards is rightfully considered one of the great goals of the EU. However, does the desirability of convergence mean that harmonisation policies are needed? Should the EU try to speed up social convergence by setting common standards or even by complementing the economic and monetary union with a social union right from the beginning of the convergence process?

The answer this paper will give is in the negative. Provided that the EU sets the conditions for economic convergence, social convergence is already being induced by the forces of economic factor price equalisation and systems competition among countries that compete for mobile factors of production. Premature social harmonisation brought about by centralised policy measures would be detrimental in the sense that it distorts the migration flows and slows down the speed of real economic convergence. Little can be gained, but much can be lost, by harmonising social conditions faster than market forces and the forces of systems competition themselves can bring it about.

The European Convention currently prepares the draft of a European constitution, and the European social union is on the agenda. The draft makes social protection and social cohesion constitutional goals of the EU, and together with the principle of non-discrimination and EU citizenship these goals could indeed imply premature harmonisation. We will discuss this issue below and argue that the consequences for the economic development of Europe would be detrimental.
To make this point we will not only put forth theoretical arguments, but also analyse the case of German unification. Germany was united by treaties on the economic, monetary and social union. We maintain that the economic and monetary unification of Germany alone would have been compatible with a prosperous development and a self-sustained upswing of the formerly communist part of the country, but that premature social unification may be considered the major reason for the economic disaster that has occurred. East Germany is not catching up and, in fact, the economic gap between the two parts of the country has widened since 1995.

Our position is not that there should never be a social union of Europe, let alone that the European welfare state is useless. There is the powerful argument that free migration may lead to an erosion of the welfare state if migrants are fully included in the host country's welfare system, and we accept that, in principle, this argument is a rationale for the harmonisation of welfare measures. Nevertheless, we maintain that, at least during the convergence phase, the principle of delayed integration is a better means to protect the welfare state against the erosive forces of welfare migration.

It is necessary for our discussion to clearly distinguish between alternative types of social policies which affect the basic variables of an economy's transition path, in particular its employment, migration and capital flows. Here we will discuss

i) social work place standards like working conditions or health and safety at work standards and

ii) the payment of wage replacement incomes such as social or unemployment assistance.

We first discuss the efficient adjustment path of wages and work related standards chosen by market forces and the forces of systems competition, following a model of
Sinn (2003), and then illustrate the distortions resulting from premature harmonisation of social standards and replacement incomes, referring to German unification and the draft proposal of the EU constitution.

II Migration and Natural Convergence

In 1963, when European borders were still rather closed, the per capita income of Portugal was 22% of that of France. In 2000 the Portuguese per capita income was 48% of the French. In 1970, Finland’s per capita income was 78% of Germany’s, but now it is about the same, in fact, even slightly higher. In 1960, the Belgian per capita income was nearly 20% higher than the average of the current EU countries. Now Belgium is hardly distinguishable from the average. The European countries have been converging.

While these are striking examples, the full convergence picture is shown in Figure 1. In 1963 the variation coefficient of the per capita GDP values (without Luxembourg) was 0.39. By 2000, it had declined to 0.26. This corresponds to an annual convergence rate of 1.1% which is about half the 2% rate observed elsewhere by Barro and Sala-i-Martin (1995).

In part, convergence results from the forces of factor price equalisation; i.e. through knowledge spill-overs, commodity trade, capital movements and labour migration. In part, convergence results from the forces of systems competition which induce governments to act competitively so as to maintain the attractiveness of their countries for mobile factors of production. Given that these forces are operative in Europe, it is not surprising that convergence has occurred.
However, convergence cannot occur instantaneously and will take decades even under the ideal circumstances of the common market that the EU is providing. This is a trivial but important point which is crucial for the evaluation for EU harmonisation policies. Convergence takes time because there are costs of adjustment and migration, resulting from the need to transport resources and people, to overcome institutional and logistical constraints and to compensate for the home preferences that typically characterise Europeans. These costs are less important for knowledge spill-overs and commodity trade, but they significantly slow down capital flows and impede the migration of people.

Sluggishness not only characterises the adjustment of the real economy but also that of government policies. It can be assumed that governments try to find an optimal mix between private and publicly controlled resources at each stage of the adjustment
process. Poor countries will find it unwise to match the luxurious infrastructure of some of the richer countries when people cannot afford the corresponding taxes, and they will not force their firms to satisfy the same labour standards and pay the same social insurance contributions as the more developed countries can afford. Prudent governments will develop social standards in line with the real development of the economies they control.

Figure 2 illustrates the large differences in wages and wage related social costs, the indirect wage costs, that currently still exist in Europe. The differences are particularly large between the new and the old EU countries, but even among the latter there are substantial differences that can partly be attributed to the different time of EU accession. The figure also shows that the differences are not limited to pecuniary wages but extend fully to indirect wage costs which include employer social insurance contributions, sick pay schemes, expenses for factory canteens, vocational training and the costs of social standards. Indirect wage costs can be seen as wages in kind which generate benefits to the employees and costs to the firms just like normal labour costs. Roughly speaking, the costs of the indirect wage components are proportional to the direct costs. Poor countries indeed tend to have low social standards and do not choose a fundamentally different mix of direct and indirect wage components from that of the richer countries.
Figure 2: Labour costs in manufacturing in EU countries and EU accession countries 2000 (euro per working hour)

Note: The figure breaks down labour costs into direct and indirect costs according to EUROSTAT definitions (Schröder 2000, p. 77). Direct costs are defined as gross wages per hour. They include employees’ social security contributions, overtime supplements, shift compensation, regularly paid premia, pay for annual leave and national holidays etc. Indirect costs consist of employer social insurance contributions, sick pay schemes, expenses for canteens, vocational training etc. They include the costs of social standards which the paper considers. EUROSTAT does not, however, take into account all categories of social standards. Safety requirements for machinery, dismissal protection rules and constraints on working time are, for example, not included. Indirect labour costs account for 49% of total labour costs. The proportion of indirect to direct wages is higher in the more advanced than in the less-developed countries. (For EU accession countries the structure of labour costs refers to the whole economy.)

To understand the nature of the convergence process, two types of migration or adjustment costs should be distinguished that impede the migration of labour and capital and slow down convergence. One is a permanent cost that is a continuing obstacle to operating in another country but does not reduce the migration speed, and one is an initial non-recurring cost that reduces the migration speed, but cannot affect the long-run migration volume. In principle, capital and labour are affected by both types of cost. However, capital seems to be affected much more by the second and labour much more by the first type, and this is what we assume. In short, we assume that capital is slow but has no home bias, and labour is fast but has a home bias.

In the case of capital one may think of the cost of acquiring information, of learning by doing, of overcoming political constraints and, in particular, of finding the funds necessary to expand the business. The cost of finance increases progressively with the investment volume since lenders and owners perceive progressively higher risks. Empirically, most of the equity capital accumulated after the establishment of new firms derives from the retention of profits, and debt grows in proportion to equity. This prevents immediate stock adjustments and implies a gradual growth process instead.

In the case of labour migration, the relevant migration costs are of a different nature. European migration is predominantly a kind of commuting with lower or higher frequencies which incurs a permanent cost as long as a migrant is living abroad. In addition to the cost of commuting, this type of cost includes the cost of maintaining two

---

1 We do not consider convergence theories that describe growth processes of countries that do not interact. (See Barro and Sala-i-Martin 1995, chs. 1 and 2.) Such theories make little sense for Europe. European convergence is driven by trade, factor movements and the exchange of knowledge.

2 Even someone who emigrates for a long period of time can in this sense be seen as a commuter if he regularly returns home to see his friends and family.
residences, the cost of paying higher rents in the host country and the subjective and objective costs of not being able to live in one's home country.

To analyse some important aspects of the convergence process in the presence of such costs, we initially consider a small, less developed country that joins a large developed area. Smallness means that the conditions in the large area are not strongly affected by the policies of the joining country and can therefore be taken as given to a first order of approximation. Assume that the small country represents one of the new accession countries of the EU and that the large area is the group of old member countries. In the accession country capital intensity and wages are low, in the core area both are high. Commodities, financial capital and technical knowledge are completely mobile across the borders.

Figure 3 illustrates the adjustment process of the accession country in the simplified form of a supply-demand diagram for the labour market. Employment in the accession country is measured on the horizontal axis, the wage rate there is shown on the vertical axis. The initial labour demand curve of the accession country’s employers is represented by DD, the labour supply curve is represented by SS.3

The labour demand curve is the usual marginal product curve. It is derived by ranking potential jobs in the accession country by the value added they generate. If the wage is lower than the value added, it is profitable for a firm to establish the job and employ a worker. Given the heterogeneous set of blue prints for potential jobs, the number of workers who can profitably be employed is obviously the larger the lower the wage rate. The demand curve is drawn for a given aggregate stock of capital. It will

---

3 Related models can be found in Sinn and Sinn (1992, chapter 5) and Sinn (2001).
shift outward over time if the stock of capital grows. As the specific adjustment cost we assumed excludes jumps in the size of the capital stock, the position of the curve is fixed at any given point in time, regardless of the volume of investment. However, the volume of investment determines the speed at which the curve moves outward over time.

The supply curve is derived by ranking heterogeneous workers according to their “stay-put” wages. The “stay-put” wage is the subjective wage at which an inhabitant of the accession country is indifferent between staying at home and moving to the core region. The “stay-put” wage of a particular inhabitant of the accession country equals the wage in the core area, \( w^* \), which is also taken to equal the marginal product of labour in the core area minus the migrant's subjective and objective cost of living in the accession country. Ranking the heterogeneous inhabitants of the accession country by the size of these costs generates the internal supply curve of the labour market of the accession country. We assume that a person migrates if his cost falls short of the wage differential between the core area and the accession country and stays in his home country if it exceeds this differential.\(^4\) As the number of people whose cost is higher than the wage differential, and who therefore do not move, is the larger the smaller the wage differential, the supply curve is upward sloping.

---

\(^4\) Admittedly, this is a crude simplification of the set of potential motives. See Schmidt (1994) for a thorough empirical investigation. However, the simplification is sufficient to make our point about the cost of premature harmonisation and it seems to fit to a first order of approximation to the commuting type of migration that we observe in Europe which differs substantially from the more permanent type of immigration that seems to characterise the US.
Suppose now that accession takes place at point in time $0$, and the previously closed borders are opened. This will induce inverse cross-border investment and migration flows between the core area and the accession country, but for the time being the labour demand curve of the accession country will not be affected. Part of the work force of the accession country now migrates rapidly to the core area, and the increased scarcity of labour in the accession country raises the wage rate above its previous level $w_0$. A temporary equilibrium is found in the labour market of the accession country where supply equals demand. The wage rate therefore rises to $w_1$, and the workers whose jobs are destroyed by this rise, CE, migrate to the core area.

The temporary equilibrium is efficient. Migration replaces the low value added that migrants could have produced in the accession country with the high value added they can produce in the core area, which equals $w^*$, and all of those whose net increase in value added is above the migration cost migrate while all others stay in the accession country. The Invisible Hand generates an allocation of the work force to the two regions that maximises the joint GNP net of migration costs that the accession country's population is able to generate at home and abroad. It is given by the area under the demand and supply curves.

Over time, the labour demand curve in the accession country will shift outward since the comparatively low wage rate $w_1$ attracts capital from the core area, and for each position of the labour demand curve there is a new temporary equilibrium with a respectively higher wage rate and a smaller stock of migrants. Migrants return to their home country as its economy catches up and offers an increasingly attractive wage.

---

5 In Germany, practically all the labour migration took place in the first two years after unification, while the annual flow of capital to east Germany has been very persistent since the time of unification.
level. The process comes to a halt when wages in the core area and the accession country are equal and the former work force is reinstalled in the new member country. This is symbolised by curve D'D' in the figure.

The Invisible Hand of competition implies full economic convergence. It not only determines the efficient temporary equilibrium but also the right speed of the adjustment process, balancing the unavoidable adjustment costs with the preference for fast convergence. The basic EU policies needed for this process to come about include the creation of a common market and a monetary union, and indeed these policies have been adopted and will bring about the expected progress.

The return migration pattern predicted by our model fits the reality of past EU migrations. A substantial part of southern European guest workers, which were recruited to work in Germany from the late 1950s through the early 1970s, have returned to their home countries. Observations of immigrants (from Italy, Greece, Spain, former Yugoslavia, and Turkey) extracted from the German Socio Economic Panel demonstrate, that of 3010 immigrants surveyed in 1984, 765 (25%) returned between 1984 and 1997 (Constant and Massey 2002, p. 13). If there were no replacement migration to compensate for some of the return migration, this would correspond to a convergence speed of 2.1% per year which is even higher than the economic convergence speed which we showed above to be in the order of 1.1%. If half of the observed return migration were replaced by new emigrants from the accession country, the return migration figure would roughly fit the actual European speed of convergence.

---

6 The formal proof can be found in Sinn (2003, chapter 4).
III Harmonising Social Standards

Let us now extend the analysis to social standards. Directives and other types of regulation bearing on working standards constitute the main instrument of EU social policy. As explained above, social standards can be seen as wages in kind that generate utility for the workers and incur costs for the firms. As both the direct wage and the wage in kind are to be paid from the same marginal product of labour, it is in the interest of workers that these two components are optimally mixed so that their utility is maximised at any given level of the overall wage cost.

In many cases it can be assumed that this optimal mix is found by the firms themselves, for a competitive firm that finds a better mix than its rivals will attract more workers or will be able to cut its wage cost. In other cases, asymmetric information
problems might legitimate a national policy of setting social standards. However, it is hard to see why an international body like the EU should be better able to fix social standards than the national governments themselves. A national government will have all the incentives and all the information needed to come up with an optimal policy, and there is no advantage to the supranational level. In particular, a premature international harmonisation of social standards at a level that is appropriate for the core area will definitely be sub-optimal for the accession country for one size cannot fit all.

To analyse the distortion, consider two alternative definitions of the wage rate:

i) the "wage cost" which is the sum of the direct and indirect cost of labour to the firm and

ii) the "equivalent wage" which is the monetary equivalent of the mix between the direct and indirect wage components as judged by the workers.

Figure 3 can be taken to refer to the case of optimal mixes in the core area and the accession country where the respective wage cost equals the equivalent wage. By way of contrast, Figure 4 represents the case of a sub-optimal mix in the accession country resulting from premature harmonisation. The core area imposes the standard that is optimal under its economic conditions on the economy of the accession country. The accession country is forced to have a sub-optimal mix between the direct wage and the wage in kind. A sub-optimal mix means less utility for any given level of the wage cost: a wedge is driven between the wage cost and the equivalent wage. The demand for labour depends on the wage cost, and the supply of labour depends on the equivalent wage, but both are no longer equal. As shown in the figure, the equilibrium employment in the accession country shrinks by FE because more people migrate to the core area. Workers are able to shift some, but not all of the cost of the sub-optimal mix of the pe-
cuniary and non-pecuniary wage components to the firms. The wage cost to the firms rises to $\bar{w}_1$ and the equivalent wage of the workers falls to $w_1$.

The harmonisation policy is clearly inefficient. It involves two types of welfare losses which are represented by the shaded areas in Figure 4. The dotted triangle measures the deadweight loss from a sub-optimal allocation of the population to the two regions. The shaded rectangle measures the deadweight loss associated with the sub-optimal mix as such which has to be borne by all workers in the accession country.

Figure 4: Premature harmonisation of social standards

The welfare cost illustrated in Figure 4 is of a static nature. It is the cost at one particular point in time, given the then available stock of capital. There is an additional cost resulting from the fact that, with any given stock of capital, the wage rate is higher and the incentive to invest in the accession country is lower. Thus, convergence is
slower than in the undistorted case. Nevertheless, there continues to be capital accumu-
lation as long as the wage cost in the accession country remains below the cost of the 
core area. As the wage cost in the accession country approaches that in the core area, the 
distortion resulting from the premature imposition of the social standards of the core 
area diminishes with the passage of time. Thus, the labour demand curve continues to 
shift to the right, albeit with a lower speed, and it converges as before to the position 
D'D'. In the end, when convergence is completed, the distortion disappears.

In short: the policy of premature harmonisation will not affect the steady state 
allocation of labour, but it will imply excessive migration, will impose a deadweight 
loss on the total work force of the accession country during the convergence process 
and will slow down the convergence process.

This does have implications for the evaluation of EU policy. Thus far, EU social 
policy has concentrated on working standards. The origins can be found in Article 117 
of the Treaty of Rome which postulated an improvement of working conditions and 
living standards. However, the required unanimity had prevented any particular devel-
opment on this matter until 1989. The EU Social Charter signed in that year, with the 
exception of the UK, can be seen as a starting point for EU social policy. The Social 
Charter gave rise to a host of directives especially bearing on health and safety issues. 
The next step towards social harmonisation was taken when provisions on social policy 
were included in the Maastricht Treaty (1992). These provisions finally became the So-
cial Chapter of the Treaty of the EU signed in Amsterdam in 1997 by all EU member 
countries (including the UK). The Social Chapter extended qualified majority voting to 
several new areas including working conditions, information and consultation of em-
ployees as well as gender equality in the labour market. Majority voting facilitated the
ratification of binding directives in the form of minimum requirements (Bean et al. 1998, pp. 1-9; Feldmann 1999; Kleinman 2002, ch. 4).  

However, the EU countries seem to have understood that fixing uniform European social standards is hampered by the diversity of national economic conditions and social preferences. Thus the 2001 EU Summit in Lisbon opted for an additional governing mode, the “Open Method of Co-ordination”. The open method of co-ordination leaves effective social policy choices to the national level, but tries to improve this process by promoting common objectives and common indicators and by comparative evaluations of national policy performance (Scharpf 2002). This is exactly what the above considerations would suggest because it effectively avoids premature harmonisation.

One of the arguments often presented in favour of a harmonisation of social standards is to prevent social dumping, i.e. unfair competition which neglects the welfare of workers. It is argued that unfavourable working conditions in the less-developed EU countries are partly the result of an unfair policy which is carried out intentionally, or at least tolerated, by the national governments. These governments, it is maintained, stick to low social standards and do not care about low wages because they know that they result in competitive advantages for the domestic industries.

The accusation of social dumping is made particularly by business representatives and union leaders of the more advanced countries, and they seek to influence the EU decision making process by lobbying for early harmonisation. They can also make use of Art. 139 (2) of the 1997 “Treaty Establishing the European Community” which pro-

---

7 EU-citizenship has not yet been very effective in promoting a European Social Union. It remains to be seen if the inclusion in the EU Constitutional Treaty will change its importance (Closa 1998; Kleinman 2002, chapter 8).
vides them with the right to take the initiative in formulating social standards, which by resolutions of the Council of Ministers can become internationally binding rules (Belke and Hebler 2002, p. 319). In the light of the above discussion, these legal provisions are dubious, to say the least. They originate from protectionist ideas framed in terms of "fair competition" among European firms, but in fact they constitute severe obstacles to the competitive forces that determine an efficient convergence path.

Differences in wages and working conditions reflect transitional phenomena during convergence that result from natural and non-surmountable frictions in the international allocation of capital and labour. Abstracting from such frictions is appropriate for a long-run analysis. Indeed, with an unrestricted exchange of goods, free choice of workplace, and free capital movements, the current differences in overall wage costs and working conditions illustrated in Figure 2 cannot be maintained in the long term. However, because of the frictions, factor price equalisation cannot, and should not, come about overnight but will take decades to be achieved. Slow adjustment of social standards is a natural feature of a transformation process, and premature harmonisation can only be detrimental.

IV Harmonising Wage Replacement Incomes

We now turn to the harmonisation of replacement incomes such as social assistance, unemployment benefits or early retirement schemes. Such replacement incomes are reservation wages; they create a floor for wages at which the eligible are willing to work. Since the productivity of a person is at the same time the ceiling of the wage an employer is willing to pay, there will be no job for this person if the replacement income exceeds his productivity. In the core countries, the actual level of the replacement
incomes may be manageable, because, or if, the replacement incomes are sufficiently far below the market wage, but a harmonisation at a level appropriate for the core that is binding for the accession countries will likely result in mass unemployment there.

Normally, mass unemployment will lead to emigration. However, mass unemployment created by high replacement incomes will not have this effect, because replacement incomes paid by the state are stay-put premia. They paralyse the incentive to look for jobs in the EU core countries if the difference between the core countries’ wage and the accession country's replacement income is less than the cost of migration. The higher the replacement income, the smaller is the number of people willing to look for jobs in the core area.

Figure 5 illustrates this. The replacement income \( w_r \) limits the number of migrants to KC and the number of jobs to AM. Accordingly it results in unemployment of size MK. The allocation of the accession country’s work force is extremely inefficient. As too many jobs are destroyed at home, domestic output falls short of the optimum by OBEM. And as too few people migrate to the core area, foreign output net of migration costs falls short of the optimum by BIKE. The total welfare loss is the sum of the shaded areas, i.e. OBIKM. The national product of the EU, net of migration costs, would rise by this amount if the natural convergence strategy were used instead of harmonising replacement incomes.

The policy will also be very costly for the government since the unemployed will have to be financed. In the figure, the area OIKM represents the budget cost to the government. In all likelihood, this budget cost will result in a demand for huge EU equalisation and cohesion programmes that generate massive flows of funds from the core countries to the accession country.
All of this is extremely inefficient. The budget cost of paying the replacement incomes exceeds the welfare cost by the triangle OIB. As the reader can easily verify for himself, this triangle shrinks to zero relative to the size of the budget cost as the replacement income per individual is reduced to the level BE where it would no longer be binding. It follows that the first step towards a harmonisation of replacement incomes that effectively constrains the accession country's economy involves a welfare cost equal to the budget cost of paying the replacement incomes.

To summarise: the harmonisation of minimum replacement incomes such as social assistance will have two extremely detrimental economic effects. It will produce unemployment in the accession countries and it will prevent useful and efficient migration which otherwise would have occurred. Even those whose migration would increase European GDP by more than the cost of migration stay in the accession countries. The fiscal cost resulting from unemployment will require compensating fiscal transfers from core countries. Any small EU fiscal equalisation programme that is used to finance initial steps towards a harmonisation of welfare payments will incur welfare losses that are equal in size to the volume of this programme.

To get a feeling for the empirical importance of the problem, Table 1 compares the level of German social assistance with the wage incomes in the eastern EU accession countries. Monthly gross wage earnings of an average production worker range from €267 in the Slovak Republic to €469 in Poland, and the corresponding wage incomes net of all taxes and social security contributions range from €322 to €417 depending on family status and country (for year 2000). These incomes are far less than west German social assistance which amounts to €614 for singles and €1508 for married couples with two children.
Figure 5: *Harmonising replacement incomes*

German social assistance payments to singles are two to three times the average net wage in the four east European accession countries and German social assistance payments to families with two children are four to six times the eastern net wage. These differences are so huge that social harmonisation on the German level would lead to an economic catastrophe with mass employment in the east.
Table 1: **Net wage earnings in eastern EU accession countries and the level of German social assistance, 2000**

<table>
<thead>
<tr>
<th></th>
<th>Monthly gross wage earnings</th>
<th>Monthly net wage earnings, single person</th>
<th>Monthly net wage earnings, one earner couple with two children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EUR(^a))</td>
<td>EUR(^a))</td>
<td>EUR(^a))</td>
</tr>
<tr>
<td>Poland</td>
<td>469</td>
<td>322</td>
<td>349</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>415</td>
<td>317</td>
<td>417</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>267</td>
<td>214</td>
<td>260</td>
</tr>
<tr>
<td>Hungary</td>
<td>300</td>
<td>202</td>
<td>256</td>
</tr>
<tr>
<td>West Germany</td>
<td>3185</td>
<td>1541</td>
<td>2135</td>
</tr>
<tr>
<td>West German social assistance</td>
<td>614</td>
<td>1508</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Average production worker


V Lessons from German Unification and the Italian Mezzogiorno

German unification is a warning example of the problems resulting from premature harmonisation of social replacement incomes and social standards. Germany had to learn painfully how expensive it is to carry out a policy of social unification against the forces of the market.

In anticipation of a prosperous future, a policy of equalisation of social conditions was implemented from the beginning. In 2001 the regular rate of social assistance to the poor has reached 96.5% of the west German level (Boss 2001, p. 15), and, thanks to various forms of social transfers, household net-incomes stand at about 80%. Pensions per recipient are even 110% of the western level (Nierhaus 1999). These figures are expressed in nominal terms. In real terms they would all be about 10 percentage points higher.
Western working standards concerning safety, pension entitlements, unemployment protection, co-determination rights, tenure laws and many other items were implemented to a large extent in east Germany. There was not even a transition phase for the adoption of these standards. East German jobs bear nearly the same indirect wage costs as jobs in the west.

Most of the social transfers paid out in east Germany were replacement incomes in the sense discussed above which implied high floors on market wages. With these payments the welfare state has emerged as the major competitor of east German industry in the labour markets and has actually squeezed out east German employment.

Table 2 reports an attempt to calculate the floor on east German wage costs resulting from the level of east German social assistance (minimum guaranteed state income) for alternative hourly "effective wage rates" and for different types of families. We define the effective wage rate as the net income increase per hour if someone moves from welfare without work to a regular full time job, and we take all taxes, contributions and transfers into account that apply in these two economic situations. The initial rows show, for the year 2000, the annual replacement income, the replacement wage rate and the hourly wage cost to the employer that corresponds to assumed alternative effective wage rates and the actual replacement wage rates in east Germany. The final three rows show the ratio of that wage cost to the actual average hourly wage cost to a west German employer (€ 27.18).

If welfare recipients are willing to accept jobs with net earnings equal to the replacement income, their effective wage rate is zero. In this case, the east German wage cost has to be at least 21.0% for a single person and 47.5% for a worker who is married and has three children. If the effective wage rate is € 2.50 per hour, the correspondingly
higher net wage income results in wage costs to the employer ranging from 38.6% to 65.8% of the average west German wage cost. And if welfare recipients accept only jobs with an effective wage rate of € 5 per hour then the wage cost to the employer in east Germany would reach percentages of the west German average wage cost that range from 62.1% to 86.9%.

Table 2: Lower bound on east German wage as a percentage of west German wage for alternative effective wage rates and family situations as implied by east German tax-transfer system, 2000

<table>
<thead>
<tr>
<th>Effective wage per hour(^a)</th>
<th>Singles</th>
<th>Couple, no children</th>
<th>Couple, 1 child</th>
<th>Couple, 2 children</th>
<th>Couple, 3 children</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
<td>EUR</td>
</tr>
<tr>
<td>(1) Annual replacement income east Germany(^b)</td>
<td>EUR</td>
<td>0 6 407</td>
<td>10 447</td>
<td>13 571</td>
<td>16 579</td>
</tr>
<tr>
<td>(2) Replacement wage rate east Germany(^c)</td>
<td>EUR</td>
<td>3.77</td>
<td>6.15</td>
<td>7.98</td>
<td>9.75</td>
</tr>
<tr>
<td>(3) East German hourly wage cost to the employer(^d)</td>
<td>EUR</td>
<td>0 5.71</td>
<td>9.31</td>
<td>10.62</td>
<td>11.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 10.49</td>
<td>13.10</td>
<td>14.78</td>
<td>16.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 16.89</td>
<td>18.16</td>
<td>20.08</td>
<td>21.86</td>
</tr>
<tr>
<td>(4) = (3) : 27.18(^e)</td>
<td>%</td>
<td>0 21.0</td>
<td>34.3</td>
<td>39.1</td>
<td>43.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5 38.6</td>
<td>48.2</td>
<td>54.3</td>
<td>60.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.0 62.1</td>
<td>66.8</td>
<td>73.9</td>
<td>80.4</td>
</tr>
</tbody>
</table>

\(a\) Assumed increment of net income per hour from adopting an east German full time job instead of receiving social assistance without working. – \(b\) Social assistance per annum, including housing allowances. – \(c\) Annual replacement income divided by 1700 hours per year. – \(d\) Wage cost per hour without VAT that corresponds to a net-of-tax wage income sufficient to compensate for the replacement wage rate and alternative effective wage rates. – \(e\) Average hourly wage cost to the employer in west Germany in euros; workers and employees in manufacturing, trade and banking; without value-added tax (= average wage cost per year divided by the average number of hours worked in west Germany [1645]).

Given this information, it is not surprising that the average east German hourly wage cost to the employer has been rising rapidly after unification and is now standing at about 70% of the respective west German figures. According to Table 2, 70% corresponds to effective wage rates per hour of between € 2.50 and € 5. These are sufficiently small numbers to explain why there would be strong resistance in east Germany against wage cuts bringing the east German wage cost to a lower percentage of that of the west.

Unfortunately, however, the 70% wage cost ratio is the central problem of the east German economy. The figure is high relative to east German productivity which, in the aggregate, is only 58% of the west, and it is also high relative to other countries.

Figure 6 gives an overview of the development of the east German and other countries' labour cost (wage cost to the employer) per hour relative to the respective west German figure from the time before unification until today, measured at the prevailing exchange rates. The east German hourly labour cost was only 7% of the west German level in 1989, but it quadrupled with the currency conversion, and in the following years it jumped to 64% (1994) and then to 70% (1999) of the western level (Sinn 2001, p. 32). After unification, German labour costs quickly surpassed those of Portugal, reaching those of Ireland in 1992. In 1995 labour costs per hour in East Germany were as high as those in France and from that time on they kept pace with France.

The main reason for the rapid wage increase can be sought in the fact that the initial wage negotiations were proxy negotiations that were carried out by people other than those who would have had to bear the consequences. The crucial wage negotia-

---

8 It is sometimes argued that the effective revaluation that came with the one-to-one currency conversion enacted in 1990 was the major policy mistake behind this development. However, the argument overlooks that the one-to-one conversion was necessary to preserve the purchasing power of east German wages. Despite the fact that the exchange rate at which the GDR had been able to sell its mer-
tions took place in 1991, long before the privatisation of the east German economy had trade unions about east German wages. There were no east German employers, and east

Figure 6: Hourly industrial labour cost relative to west German costs

Note: The database of the Cologne Institute for Business Research is based on EUROSTATs surveys of labour costs carried out in 1988, 1992, 1996 and 2000. The interpolations for 1993, 1994 and 1995 were made by the ifo Institute.


chandises in the west was 4.3:1, the east German mark had been more valuable to east German consumers at east German prices than the west German mark was at west German prices because the prices of consumer goods were much lower in the east than in the west. Thus there was no politically feasible way by which the one-to-one conversion could have been avoided. In terms of consumer goods, wages in the east were about one third of the west before and after the currency conversion. Had that wage level been preserved until privatisation was completed, the east German economy would have become competitive very quickly as international investors would have flooded into the country. The new funds and the transfer of knowledge would have created a second economic miracle in Germany, paralleling the one that took place after WW II.
German workers had no say. The west German negotiators were determined to adjust eastern wages as quickly as possible to the western level to eliminate the risk that low-wage competition by eastern firms, revitalised with fresh international capital and know how, would reduce profits and jobs in the west.

While the proxy negotiations triggered off the wage adjustment, they cannot explain the persistence of high wages in east Germany to this day. Surprisingly, wages have remained high despite the fact that the new entrepreneurs that were lured to the east with generous government subsidies tried to escape from the contracts as soon as they had taken command. As of today, only 15% of east German firms and no more than 45% of the privately employed east German work force is covered by union contracts. Nevertheless, wages do not react to the mass unemployment. This persistence is undoubtedly due to the welfare state itself. For the reasons explained in Table 2, it is not really possible to reduce the wages significantly below their current levels without violating the reservation wage constraint stemming from the minimum replacement incomes the welfare state offers in east Germany.

The consequences of the high wage strategy are well known. The east German economy collapsed immediately after unification, with 80% of the industrial jobs being destroyed, industrial output falling by more than 60% and GDP falling by more than a third. After this collapse there was a straw fire until 1996 that was nourished by an extremely generous investment subsidy programme which effectively eliminated the cost of capital, even pushing it to negative values. As soon as this programme was cancelled, the east German economy began to slump, and the gap between western and eastern GDP per capita widened in every consecutive year. Ordinary employment paying social security contributions has been shrinking at an annual rate of nearly 2% during this
time, and mass unemployment has grown to dangerously high levels. Investment in equipment per person of working age which, under the investment subsidy programme, had peaked at 144% of the western level, fell to only 88% in 2002.

In the first decade after unification, the west German government transferred a net amount of €750 billion to east Germany, a sum that was mostly financed by public borrowing. The sum is ten times as large as the sum that Chancellor Kohl's political opponent Oscar Lafontaine had once claimed German unification would cost and that contributed to his defeat in the election. Currently, the annual transfer still amounts to about €80 billion, which corresponds to about 4.0% of west German GDP. The east German current account deficit is about 45% of its own GDP. About three quarters of this deficit is financed by public transfers, and only one quarter by private capital flows. However, a substantial part of the private capital flows are used to buy the bonds issued by the east German states with the consequence that the debt/GDP ratio of the east German states has already surpassed that of their western counterparts. This development is not sustainable.

The east German situation parallels the Italian Mezzogiorno which has not caught up with the north, stagnating at a GDP per capita of about 60% of northern Italy, which is the same figure as that for Germany. Unemployment in the Mezzogiorno is persistent, and permanent transfers from the north are necessary to compensate for the poor economic performance. Although the current account deficit is only 13% of GDP rather than the German 45%, the similarities are striking (Sinn and Westermann 2000, p. 5).

A particularly important similarity concerns the causes of the Italian problem which can be seen in wage harmonisation brought about by the collective bargaining
process (Attanasio and Padoa-Schioppa 1991, Sinn and Westermann 2000).\footnote{A regional wage differentiation was possible in the 1950s and early 1960s and has again been possible since 1999.} The existing gap goes back to the fact that north Italian wages exceed the nation-wide union wages on average, while south Italian wages are rather close to the union wages.

That the wages are too high becomes obvious when the unemployment situation is considered. In 2002 the unemployment rate in the north was as low as 4%, whereas the unemployment rate in the south was as high as 18%. More than 60% of the 2 million unemployed workers estimated by the labour force surveys live in the southern regions of Italy. Since the 1970s, the difference in unemployment rates has been very similar to the present situation (Bertola and Garibaldi 2002). In addition to the high unemployment rate, the Mezzogiorno is dependent on governmental transfers whose magnitude in 1988 amounted to 20% of the regional GDP. At that time transfers amounted to roughly € 40 billion. Recently, the Italian subsidies have declined, having partly been replaced by EU subsidies (Belke and Hebler 2002, p. 315; Sinn and Westermann 2000, pp. 8- 9).

The German and the Italian policy mistakes should not be repeated at the European level. Social standards, social assistance, unemployment benefits and wages must continue to be considerably lower in the less-advanced countries than in the core areas during a long transition period and until an adequate capital stock has been accumulated. As to the wage proxy negotiations, they can be ruled out for the EU accession countries because negotiations there will take place between national trade unions and national employers. It is hard to imagine that they will come under pressure from the core countries. With respect to social standards and wage replacement incomes, however, the situation is different. The EU, bullied by labour unions and employer associa-
VI Social Inclusion, EU Constitution and Labour Migration: Lessons for Europe

Unfortunately, the risk that the Italo-German development model will be repeated in Europe will rise significantly if the draft proposal of the European constitution that the European Convention presented in February 2003 will be accepted. The problem lies in the proclamation of European citizenship (Art. 7) in combination with the prohibition of discrimination on the basis of national citizenship (Art. 6) and the proclaimed goals of social protection and social cohesion (Art. 3 and 12). All of these clauses were included in earlier EU treaties and were implicit in the decisions of the European Court of Justice, but now they are to be elevated to the status of constitutional law. This new superior status would imply that they would supersede all existing European laws and treaties. In particular, it seems likely that the limitations of the so-called social inclusion principle that are currently in place would be eliminated, implying a social union for Europe.

The inclusion principle is currently interpreted to mean that an EU citizen who moves from one EU country to another in order to work is immediately and fully integrated into the social system of the host country. The immigrant pays taxes and social insurance contributions and, together with his family, is eligible for all state benefits available to domestic employees. An immigrant worker with a below-average income profits from the income redistribution of the welfare state just as a national does. Based on statistical information on past immigrants to Germany, the Ifo Institute calculated that the net amount of resources received per person and year was approximately €
2,300 in the first ten years. A family of four living in Germany for ten years would accordingly receive an immigration premium of nearly € 100,000.

Restricting the inclusion principle to working immigrants has limited this kind of immigration subsidy. Those who immigrate for reasons other than employment receive no welfare benefits apart from emergency health care. However, the proposals of the European Convention could mean that the inclusion principle will apply to all migrants from EU countries, including pensioners and other people who are not included in the discrimination clause in connection with EU citizenship in the sense of full social inclusion. Courts have already rendered generous rulings on the inclusion principle based on the present EU treaties.

Welfare shopping would be the constitutional right of every EU citizen, amplifying current problems with the inclusion principle. If having work is no longer required before immigrating to a welfare state, the flood-gates will be opened. Masses of poverty refugees will move from eastern European countries to the west to seek their fortune. The transitional, post-enlargement regulations will only help temporarily. The financial burdens that already plague western European welfare states will become so enormous that radical cuts will be inevitable.

Traditional social welfare states could not be maintained under these circumstances because governments will try to stem migration by reducing social benefits. Since highly mobile poverty refugees have their choice of western European welfare

---

10 Ifo calculations are based on a „fiscal balance“ of previous immigration to Germany and include social insurance, tax-financed social services and all state revenue and expenditure (Sinn et al. 2001, p. 227).
states, these governments would compete in warding them off. With the inclusion prin-
ciple in force, welfare states are forced to participate in a race to the bottom.

International harmonisation of social replacement incomes at the EU level could
prevent this, and in fact the draft constitution contains sufficient references to social
protection and cohesion of Europe that would encourage such policies.

But this would mean chaos since social standards acceptable to the more devel-
oped countries would produce mass unemployment in Europe, as we explained above.
As is shown in Figure 7, in all eastern European countries net wage income is less than
30% of west German social assistance, and even the present EU contains Portuguese,
Greek and Spanish regions where net wage income is less than half the German welfare
level. A harmonisation of social assistance at a level still acceptable to mature western
European economies would lead to the de-industrialisation of whole regions in southern
and eastern Europe and would put a halt on their economic development.

The economic pain of the less developed countries must then be eased by inter-
governmental fiscal transfers from the more developed regions. The cohesion principle
in the draft constitution would permit such a policy. The Italo-German figures of public
transfers in the order of 20%-30% of the South Italian and East German GDPs indicate
the orders of magnitude involved.

There is a growing consensus that the EU institutional structure should be
equipped to deal with the risk of race-to-the-bottom tensions in the field of welfare pol-
icy (Bertola et al. 2001, pp. 89--96). In order to prevent a race to the bottom it has been
proposed to establish an EU transfer system to guarantee a minimum welfare level to all
citizens. For Bertola et al. (2001, pp. 105-107) some interjurisdictional redistribution
and the resulting unemployment is hardly avoidable given the different income levels of EU countries. Hence, minimum welfare transfers should be co-financed by the EU budget. When targeting minimum assistance levels, policy makers should bear in mind the trade-off between welfare shopping and employment. In order to prevent welfare shopping, the minimum standard needs to be specified in absolute terms rather than in relation to local incomes. Cost-of-living differentials should, however, be taken into

Figure 7: Social inclusion and the new European Mezzogiornos, 2000

![Graph showing Net wage income and West German social assistance for various European regions.]

- **Hungary**
- **Slovak Republic**
- **Poland**
- **Aceros (Portugal)**
- **Czech Republic**
- **Ipeiros (Greece)**
- **Estremadura (Spain)**
- **Calabria (Italy)**
- **Burgenland (Austria)**
- **Languedoc-Roussillon (France)**
- **Flevoland (Netherlands)**
- **Chernitz (Germany)**

**Net wage income**

**West German social assistance**

**a)** One earner couple with 2 children, average production worker. b) Couple with 2 children.

account by the definition of country-specific and region-specific minimum levels of welfare provision. On the other hand, uniform absolute welfare standards would have negative employment effects in relatively poor countries or regions, since they increase the reservation wage. In order not to reduce employment, minimum assistance levels should be specified on a relative basis, as a proportion of local average earnings, and they would be much lower in Portugal and Poland than in Germany or the United Kingdom. Guided by the extent of labour mobility, a compromise between fixing minimum assistance levels in absolute EU-wide terms or targeting them in relation to local average earnings should be found.

We do not agree with this proposal because a partial harmonisation of wage replacement incomes means a partial catastrophe of the type we observe in the Italian and German Mezzogiornos. Europe cannot afford more mass unemployment, let alone mass unemployment concentrated in its backward regions. Admittedly, some harmonisation of replacement incomes could make sense in the far distant future when the economic convergence process has come to an end, to prevent a race to the bottom, but even then harmonisation would not require any international transfer payments, let alone the establishment of an EU institution for that purpose.

VII The Principle of Selectively Delayed Integration and the EU Constitution

As an alternative to a harmonisation of replacement incomes, the Expert Council of the German Ministry of Finance (2001), the Ifo Institute (Sinn et al. 2001) and recently the European Economic Advisory Group (2003) have proposed the "principle of selectively delayed integration" of immigrants into the welfare state. This is a modified version of
the home country principle for welfare benefits.\textsuperscript{11} Immigrants pay taxes and social security contributions as resident citizens and they have, in turn, free access to the public infrastructure, to police, to legal protection and to free education; they also receive undiminished benefits from the contribution-financed social system. But certain tax-financed benefits like social assistance, rent subsidies, and public housing would not be available during some initial period of residence. The range of benefit restrictions would be balanced so that the present value of the benefits the immigrants receive is equal to the present value of the taxes and contributions they pay. The principle is that any EU citizen can migrate and work freely but would receive no gifts from the host country. As we stated above, empirically these gifts amounted to €2300 per person and year during the first ten years after immigration to Germany or nearly €100,000 for a family of four in total. The principle of selectively delayed integration would therefore have significant economic consequences.

Even with delayed integration into the welfare state, there will be migration, but it will be driven by the genuine incentives of the market economy rather than the artificial incentives set by the welfare state. With a single stroke the welfare policy of the national governments could be freed from having to take into account the migration processes it itself causes, and the forces eroding the welfare state would be tamed. The race to the bottom would not take place. The protective harmonisation of social replacement incomes would be unnecessary and, what is more, the economic forces that bring about social convergence in Europe would be strengthened. As was explained above, the premature harmonisation of replacement incomes in Europe would drive up wages in the

\textsuperscript{11} See also Richter (2002) and Sinn (2002).
less developed countries and slow down capital investment. Adopting the principle of selectively delayed integration would prevent this development.

The introduction of the principle of delayed integration is particularly timely in the light of the eastern enlargement of the EU scheduled for 2004, because the welfare gaps with regard to these countries are particularly large and substantial migration flows are expected. The EU has already agreed on a seven year transition period during which there will be quantity constraints on migration and bureaucrats will select the migrants according to specific criteria. This solution implies a postponement of some of the basic liberties granted in the Treaty of Rome (Sinn 2003, ch. 3). It is a severe intervention in the market process which will lead to large welfare losses due to inefficiently low migration volumes and a distorted selection of migrants relative to what a market solution would have brought about. The principle of delayed integration is the better alternative.

When the principle of selectively delayed integration into the welfare state is applied, economic and social convergence brought about by the forces of private and governmental competition will be fast and efficient. The social objectives of Europe can be reached without the enormous economic costs in terms of unemployment and distorted migration decisions that otherwise would have to be borne. However, in order for this solution to be achieved, the non-discrimination clause in Article 6 of the draft of the constitution will have to be abandoned or at least restricted to issues other than social transfers.

There are important examples for a partial implementation of the home country principle that are similar to the idea of delayed integration. Swiss cities provide certain kinds of welfare assistance to citizens born in the city even if they live elsewhere. The United States practises a world-wide income concept forcing American firms and indi-
individuals operating and living abroad to declare their incomes and pay taxes in the US. It would be wise for the EU to write the new constitution in a way that makes it possible to follow these examples and to pave the way for the principle of selectively delayed integration.

**VII Conclusions**

Europe is converging much faster than could have been expected twenty years ago. The creation of the common market for goods and services and the completion of a single capital market by means of a common currency have levelled the playing field. Investment and other forces of growth have been shifting to the previously disadvantaged countries, and the old core countries have lost their advantages of size and location. Economic convergence automatically brings about social convergence. Wages are becoming more and more equal, and the countries whose economies are catching up can also afford steady improvements of their social standards. No doubt, the forces of the market and systems competition bring about rapid social convergence.

Beyond the creation of common capital, goods and labour markets as well as international transfers for the purpose of supporting infrastructure investment, the EU can do very little to improve or speed up the convergence process. In particular, there is no need for social policies at the EU level. Such policies incur the risk of distorting the migration decisions and slowing down capital flows to the disadvantaged regions. The examples of east Germany and the Italian Mezzogiorno point to the economic horrors that would result. A premature harmonisation of social standards is the recipe for the guaranteed failure of economic growth in Europe.
It is true that the welfare state will be threatened by the free migration of people in Europe. The race to the bottom is a serious risk. However, to contain this risk, neither harmonisation of welfare payments nor constraints on migration are needed. The adoption of a weak version of the home country principle for intra-EU migration, which we call the principle of selectively delayed integration, is the better alternative. Adhering to this principle will ensure a maximal convergence speed and safeguard the European welfare state despite the increasing mobility of people. The fathers and mothers of the European constitution should think about the economic consequences of their recommendations. Sometimes ideals will not materialise when they are enforced by binding legal provisions.
References


Bean, Ch., S. Bentolila, G. Bertola, and J. Dolado (1998), Social Europe: One for All?, CEPR: London.


897 Jeremy Edwards, Gains from Trade in Tax Revenue and the Efficiency Case for Trade Taxes, March 2003

898 Rainer Fehn and Thomas Fuchs, Capital Market Institutions and Venture Capital: Do They Affect Unemployment and Labour Demand?, March 2003

899 Ronald MacDonald and Cezary Wójcik, Catching Up: The Role of Demand, Supply and Regulated Price Effects on the Real Exchange Rates of Four Accession Countries, March 2003


901 Stergios Skaperdas, Restraining the Genuine Homo Economicus: Why the Economy Cannot be Divorced from its Governance, April 2003

902 Yin-Wong Cheung, Menzie D. Chinn, and Antonio Garcia Pascual, What Do We Know about Recent Exchange Rate Models? In-Sample Fit and Out-of-Sample Performance Evaluated, April 2003


904 Phornchanok Cumperayot, Dusting off the Perception of Risk and Returns in FOREX Markets, April 2003

905 Kai A Konrad, Inverse Campaigning, April 2003

906 Lars P. Feld and Stefan Voigt, Economic Growth and Judicial Independence: Cross Country Evidence Using a New Set of Indicators, April 2003

907 Giuseppe Bertola and Pietro Garibaldi, The Structure and History of Italian Unemployment, April 2003

908 Robert A.J. Dur and Otto H. Swank, Producing and Manipulating Information, April 2003

909 Christian Gollier, Collective Risk-Taking Decisions with Heterogeneous Beliefs, April 2003
Alexander F Wagner, Mathias Dufour, and Friedrich Schneider, Satisfaction not Guaranteed – Institutions and Satisfaction with Democracy in Western Europe, April 2003

Ngo Van Long, Raymond Riezman, and Antoine Soubeyran, Trade, Wage Gaps, and Specific Human Capital Accumulation, April 2003

Andrea Goldstein, Privatization in Italy 1993-2002: Goals, Institutions, Outcomes, and Outstanding Issues, April 2003

Rajshri Jayaraman and Mandar Oak, The Signaling Role of Municipal Currencies in Local Development, April 2003

Volker Grossmann, Managerial Job Assignment and Imperfect Competition in Asymmetric Equilibrium, April 2003

Christian Gollier and Richard Zeckhauser, Collective Investment Decision Making with Heterogeneous Time Preferences, April 2003

Thomas Moutos and William Scarth, Some Macroeconomic Consequences of Basic Income and Employment Subsidies, April 2003

Jan C. van Ours, Has the Dutch Miracle Come to an End?, April 2003

Bertil Holmlund, The Rise and Fall of Swedish Unemployment, April 2003

Bernd Huber and Marco Runkel, Optimal Design of Intergovernmental Grants under Asymmetric Information, April 2003

Klaus Wälde, Endogenous Business Cycles and Growth, April 2003

Ramon Castillo and Stergios Skaperdas, All in the Family or Public? Law and Appropriative Costs as Determinants of Ownership Structure, April 2003

Peter Fredriksson and Bertil Holmlund, Improving Incentives in Unemployment Insurance: A Review of Recent Research, April 2003

Bernard M.S. van Praag and Adam S. Booij, Risk Aversion and the Subjective Time Discount Rate: A Joint Approach, April 2003

Yin-Wong Cheung, Kon S. Lai, and Michael Bergman, Dissecting the PPP Puzzle: The Unconventional Roles of Nominal Exchange Rate and Price Adjustment, April 2003

Ugo Trivellato and Anna Giraldo, Assessing the ‘Choosiness’ of Job Seekers. An Exploratory Approach and Evidence for Italy, April 2003

Rudi Dornbusch and Stanley Fischer, International Financial Crises, April 2003

David-Jan Jansen and Jakob de Haan, Statements of ECB Officials and their Effect on the Level and Volatility of the Euro-Dollar Exchange Rate, April 2003

929 Paolo M. Panteghini and Guttorm Schjelderup, Competing for Foreign Direct Investments: A Real Options Approach, April 2003

930 Ansgar Belke, Rainer Fehn, and Neil Foster, Does Venture Capital Investment Spur Employment Growth?, April 2003

931 Assar Lindbeck, Sten Nyberg, and Jörgen W. Weibull, Social Norms and Welfare State Dynamics, April 2003

932 Myrna Wooders and Ben Zissimos, Hotelling Tax Competition, April 2003

933 Torben M. Andersen, From Excess to Shortage – Recent Developments in the Danish Labour Market, April 2003

934 Paolo M. Panteghini and Carlo Scarpa, Irreversible Investments and Regulatory Risk, April 2003


936 Klaus Adam, George W. Evans, and Seppo Honkapohja, Are Stationary Hyperinflation Paths Learnable?, April 2003

937 Ulrich Hange, Education Policy and Mobility: Some Basic Results, May 2003

938 Sören Blomquist and Vidar Christiansen, Is there a Case for Public Provision of Private Goods if Preferences are Heterogeneous? An Example with Day Care, May 2003

939 Hendrik Jürges, Kerstin Schneider, and Felix Büchel, The Effect of Central Exit Examinations on Student Achievement: Quasi-experimental Evidence from TIMSS Germany, May 2003

940 Samuel Bentolila and Juan F. Jimeno, Spanish Unemployment: The End of the Wild Ride?, May 2003


942 Ronnie Schöb, Workfare and Trade Unions: Labor Market Repercussions of Welfare Reform, May 2003

943 Marko Köthenbürger, Tax Competition in a Fiscal Union with Decentralized Leadership, May 2003

Kaniska Dam and David Pérez-Castrillo, The Principal-Agent Matching Market, May 2003


Erkki Koskela and Mikko Puhakka, Stabilizing Competitive Cycles with Distortionary Taxation, May 2003

Steffen Huck and Kai A. Konrad, Strategic Trade Policy and Merger Profitability, May 2003

Frederick van der Ploeg, Beyond the Dogma of the Fixed Book Price Agreement, May 2003

Thomas Eichner and Rüdiger Pethig, A Microfoundation of Predator-Prey Dynamics, May 2003

Burkhard Heer and Bernd Süßmuth, Cold Progression and its Effects on Income Distribution, May 2003

Yu-Fu Chen and Michael Funke, Labour Demand in Germany: An Assessment of Non-Wage Labour Costs, May 2003

Hans Gersbach and Hans Haller, Competitive Markets, Collective Decisions and Group Formation, May 2003

Armin Falk, Urs Fischbacher, and Simon Gächter, Living in Two Neighborhoods – Social Interactions in the LAB, May 2003

Margarita Katsimi, Training, Job Security and Incentive Wages, May 2003

Clemens Fuest, Bernd Huber, and Jack Mintz, Capital Mobility and Tax Competition: A Survey, May 2003


Laura Bottazzi and Marco Da Rin, Financing Entrepreneurial Firms in Europe: Facts, Issues, and Research Agenda, June 2003

Bruno S. Frey and Matthias Benz, Being Independent is a Great Thing: Subjective Evaluations of Self-Employment and Hierarchy, June 2003

Aaron Tornell and Frank Westermann, Credit Market Imperfections in Middle Income Countries, June 2003

Hans-Werner Sinn and Wolfgang Ochel, Social Union, Convergence and Migration, June 2003