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### WELFARE TO WORK

#### Forum

Rebecca M. Blank  
Jeffrey Grogger and  
Lynn A. Karoly  
Ivar Lødemel  
Wolfgang Ochel  
Gerard J. van den Berg,  
Bas van der Klaauw

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### THE GERMAN ELECTRICITY SECTOR

#### Research Reports

Andreas Kuhlmann and  
Ingo Vogelsang

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### FAMILY POLICY IN FRANCE

#### Reform Models

Jeanne Fagnani

### US UNEMPLOYMENT INSURANCE

Julia Fath and  
Clemens Fuest

---

INTERNATIONAL RECRUITMENT  
HEALTH-CARE FINANCING  
TUITION FEES  
PUBLIC DEFICITS  
STUDENT LOAN REPAYMENT  
DEPOSIT INSURANCE

#### Database

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**Forum****WELFARE TO WORK****An Overview of Welfare-to-Work Efforts***Rebecca M. Blank*

3

**Welfare Reform, Work and Wages: A Summary of the US Experience***Jeffrey Grogger and Lynn A. Karoly*

8

**Workfare: Towards a New Entitlement or a Cost-cutting Device Targeted at Those Most Distant from the Labour Market?***Ivar Lødemel*

13

**Hartz IV – Welfare to Work in Germany***Wolfgang Ochel*

18

**Job Search Monitoring and Sanctions***Gerard J. van den Berg and Bas van der Klaauw*

26

**Research Reports****The German Electricity Sector – Finally on the Move?***Andreas Kuhlmann and Ingo Vogelsang*

30

**Reform Models****Family Policy in France: Old Challenges, New Tensions***Jeanne Fagnani*

40

**Experience Rating of Unemployment Insurance in the US: A Model for Europe?***Julia Fath and Clemens Fuest*

45

**Database****International Recruitment of the Highly Skilled**

51

**Structural Changes of Health-Care Financing**

53

**Tuition Fees in Europe**

55

**Public Deficits in Europe**

58

**Student Loan Repayment Regimes**

60

**Deposit Insurance**

65

**News****New at DICE Database, Conferences**

67

# WELFARE TO WORK

## AN OVERVIEW OF WELFARE-TO-WORK EFFORTS

REBECCA M. BLANK\*

Over the past decade, there has been substantial interest throughout Europe in the US policy changes designed to move welfare recipients into employment. This paper summarizes some of the main research and policy lessons from US welfare-to-work programs, with particular emphasis on those issues of interest in a European context.

“Welfare” in the United States has primarily meant cash payments to single mothers. Only about 10 percent of the welfare caseload is married couples with children, who face more stringent eligibility conditions. This is in contrast to many European countries where social assistance programs are typically available to singles and married couples, with and without children. Hence, the US welfare-to-work policies focused on moving low-skilled single mothers into work and may not apply to persons in other living situations. Single mothers form a significant (and growing) population among welfare recipients in almost all countries, however.

### Welfare to work efforts in the United States

Because of the federalist structure of US government, welfare programs have been the shared responsibility of federal and state (and often county or city) governments. State and local governments have always had administrative responsibility for operating these programs. Starting in the 1980s, the federal government began to encourage states to design programs that explicitly helped welfare recipients enter the workforce. This culminated in the 1996 national welfare reform bill, which gave states much greater discretion over designing welfare pro-

grams, but (somewhat contradictorily) increased the requirements on states to run mandatory welfare-to-work programs. Hence, US experience with welfare-to-work comes not from centralized program efforts, but from multiple state programs, each with its own particular design.

States have encouraged work through both positive work incentives and more punitive work mandates. Few states made major cuts in benefit levels for non-workers (although steady inflation erosion of welfare benefits has lowered overall benefit levels in most states over time). US benefit levels have always been relatively low, however. In 2000, monthly benefits in the median state for a non-working mother with two children were at the level of what one would earn working 17 hours/week at the minimum wage.

The measures that states have taken to encourage work include the following:

- Mandatory welfare-to-work programs. As a condition of benefit receipt, recipients who are labeled “work-ready” are required to participate in programs that focus on moving them into employment. These are typically not education and training programs, but are instead “work-first” programs, aimed at getting women into jobs as quickly as possible. The programs may include training in job search and job retention, but are often quite short-term (at the most 1–2 months) and typically end with mandatory job search.
- Funding for child care assistance and other work supports. As work requirements have grown, so have the funds available to subsidize paid child care for welfare recipients and welfare leavers. States often provide assistance for other work-related expenses, particularly transportation. In addition, expansions in public health insurance programs (available only to welfare recipients in the past) have allowed a growing number of low-income children and adults access to health insurance even after their families leave welfare. The adequacy of these child care and health expansions is the subject of ongoing debate.
- Increased earnings disregards. Many states have lowered the rate at which benefits decline as earn-



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ings increase, allowing women to keep some benefits at low levels of earnings. This acts as a subsidy to low-wage work and increases the incentives to enter work; in the past, earnings gains were often offset almost dollar-for-dollar with benefit reductions for women trying to leave welfare.

- Time limits on welfare receipt. Since 1996, welfare recipients are eligible for only 60 months of federally funded benefits throughout their adult lifetime (states can excuse some recipients from this time limit). Some states have enforced time limits quite strictly, while others have provided state-funded benefits for many women after they hit the federal time-line. The threat of time limits has given case managers a strong tool that they use to urge recipients to avoid long-term reliance on welfare.
- Sanctions for recipients who do not comply with welfare-to-work requirements. More women appear to have lost eligibility for welfare benefits because of sanctions rather than time limits. Women who do not participate fully in the welfare-to-work programs to which they are assigned can lose their benefit eligibility. In some states such losses can be permanent; in other states, sanctions will result in only temporary benefit loss.

All of these policies increase the incentives for welfare recipients to move into work. At the same time as these changes were being implemented, the US also expanded work incentives for low-wage workers in two other ways. First, minimum wages rose 11 percent in real (inflation-adjusted) terms between 1989 and 2000. Second, the federal government greatly expanded wage subsidies to working families with children in the federal tax system. The Earned Income Tax Credit (EITC) offsets tax liabilities and (for those with no tax liabilities) provides a subsidy to low-wage earners with children in low-income families.

Because the EITC is run through the tax system, it is conditioned on both individual wages and household earnings, making it a very effective targeted program that avoids subsidizing low-wage earners in higher income households. Because individuals file their own tax returns, employers are not necessarily aware which of their low-wage workers have eligibility for the EITC. This means that the EITC may avoid some of the problems experi-

enced with wage subsidies, where employers capture part of the subsidy by reducing their wage offers. The US EITC has received a great deal of research and policy attention. Details on its operation and design are provided by Hoffman and Seidman (2003). European interest in the EITC has been particularly strong, and the British Working Families Tax Credit, adopted in 1998 was modeled on the EITC.

**Did behavior change?**

The net effect of these welfare and wage policies has been to increase exits from welfare programs and reduce entry. Caseloads have fallen significantly, while employment among less-skilled single mothers has risen. Figure 1 shows the changes in the number of welfare recipients in the US over the last 30 years. By 2001, caseloads were at 40 percent of their level in 1994. Furthermore, the mild recession and higher unemployment rates in the early 2000s had almost no effect on caseloads. Families did not return to welfare, even when jobs became less scarce.

Figure 2 shows changes in labor force participation among single mothers by skill level. The solid line shows the increase in labor force participation among the least skilled single mothers was greater over the 1990s than among any other group. While labor force participation fell slightly for less skilled single mothers with the economic slowdown of the early 2000s, it still remains well above where it was a decade ago.

The Table shows the effects of these changes on the income composition of single mother households. The share of income from public assistance fell from 23 to

**Figure 1**

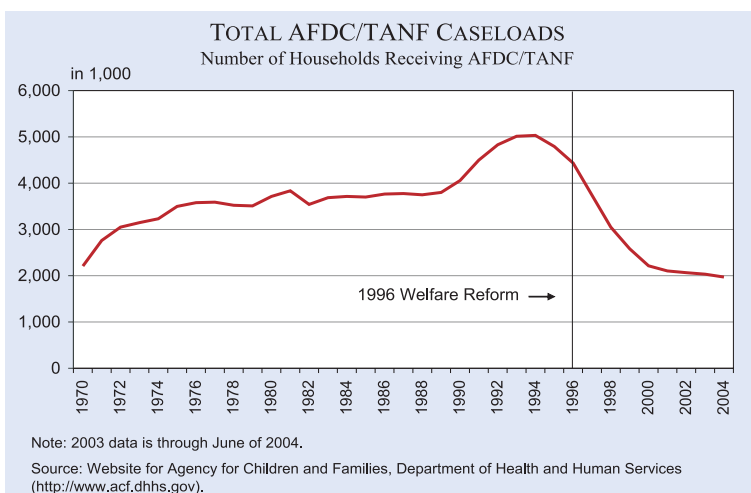
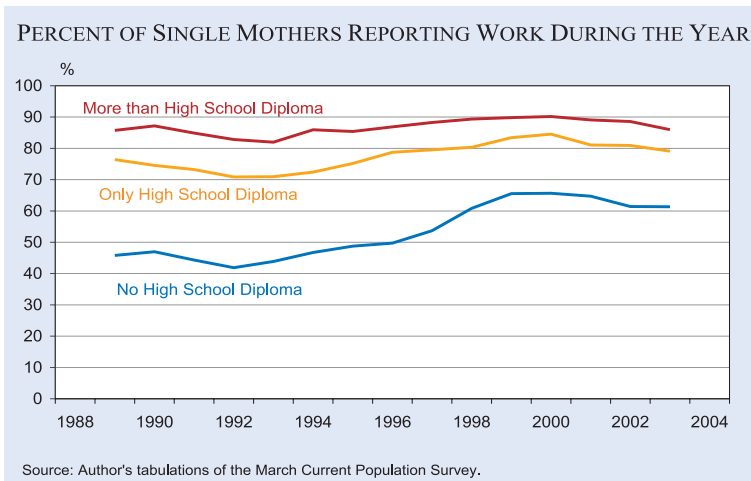


Figure 2



4 percent between 1985 and 2002, while the share of income from own earnings rose from 49 to 67 percent. Overall, real incomes rose by more than \$3,000.

A substantial body of research has investigated how much of the change in welfare participation, in work behavior, and in income is due to the changing welfare and tax policies in the US that promoted work for low income families, and particularly for welfare recipients. This work is summarized in Blank (2002) and Grogger and Karoly (2005). It suggests that the policy changes of the 1990s were a significant factor in the increases in labor market involvement, reductions in poverty, and reductions in caseloads. The strong US economy of the 1990s was highly important for these changes as well, allowing these policy changes to be implemented at a time when unemployment was low and jobs were readily available in most areas of the country. But even when unemployment went up and economic growth slowed, caseloads remained low, labor force participation remained higher, and poverty rates of single mothers

remained well below where they had been in the early 1990s.

This does not imply that the US welfare-to-work efforts have been an unqualified success. A variety of troubling issues remains unsolved. A growing number of single mothers report neither receiving welfare nor working, and the well-being of these families is a particular concern. Women who have hit time limits or sanctions seem particularly likely to be in this group and by most reports are worse off following these changes.

Furthermore, although a large number of women have left welfare for work, far fewer have actually escaped poverty. More than a quarter of all single mothers remain poor.

**Lessons from the US experience**

Drawing lessons from the US experience with welfare-to-work efforts for those in other countries is a difficult task given large cross-country differences in economic and institutional structure, and in social norms around income redistribution. Hence, the following comments must be read with skepticism. That said, let me focus on five key policy lessons that I draw from observing US efforts to move more welfare recipients into work.

First, the dual emphasis in the US policy on both positive work incentives and on more punitive work mandates seems to have been important. Work mandates (mandatory welfare-to-work programs, backed by sanctions and time limits) seem to have forced more people into work faster than would have naturally left welfare in a strong economic environment. On the other hand, with low wages and (often) part-time hours, many of these welfare leavers would gain little in income without subsidies to low-wage work. Reduced earnings disregards, the expanded EITC, and subsidies to assist with child care or other work-related expenses, all helped “make work pay”, to use the phrase popularized by President Clinton in the mid-1990s.

This conclusion is buttressed by several research studies that have looked at various “financial incentive” programs aimed at increasing employment (summarized in Blank 2002 or Michalopolous and

**Single mothers' income composition**

	Total income	Public assistance	Own earnings	Other earnings	Other income
	(in 2000 dollars)	in percent of total income			
1985	20,417	23.82	49.03	5.49	21.66
1990	18,412	22.63	53.32	4.15	19.90
1995	20,026	16.46	56.52	3.63	23.39
2000	23,654	5.27	68.77	4.19	21.77
2002	23,805	4.45	67.18	3.98	24.40

Note: Total income is the mean dollar value (in 2000 dollars) before taxes. Public assistance is composed primarily of AFDC and TANF benefits. These calculations are pre-tax and do not include the imputed value of any in-kind benefits.

Source: Author's tabulations of the March Current Population Survey.

Berlin 2001). These suggest that work mandates alone generate increased work but have limited effect on poverty as increased earnings are offset by lost benefits; wage subsidies increased income among workers but did little to move a lot of additional people into work; only programs that combined both subsidies and mandates had the desired effect of *both* increasing work and reducing poverty.

My impression is that European welfare to work efforts have generally focused more on positive work incentives (wage subsidies), without the more punitive aspects of mandatory work programs with time-limited benefits. These programs might reduce economic need among low-wage workers, but this emphasis on positive work incentives alone may not be enough to create substantial movement into work.

Second, simply getting women into jobs was not enough; other work supports were very important for the success of US welfare-to-work programs. The abundant job environment of the mid-1990s in the US made it relatively easy for many women to find work. But the women who were most successful did more than just find a job; these women were also able to arrange stable child care, had access to transportation that got them to where jobs were located, and did not experience depression or other physical or mental health problems.

In short, there are many barriers to work, and finding a job solves only one of those barriers. Programs that are serious about moving as many women as possible into employment will help with the other barriers as well, working with women on child care, management of housing or transportation problems, and assuring access to good medical care. Put another way, countries with widespread public child care (such as France) will find welfare-to-work efforts far easier than countries without such support (such as Germany), even in equivalent economic environments.

Third, the availability of low-skilled jobs is necessary for an effective welfare-to-work effort. The US economy, with relatively low unemployment rates and larger numbers of lower-wage jobs, provides a better environment for welfare-to-work efforts than many European countries. Hence, welfare reforms and labor market reforms to create greater job growth and job flexibility (particularly access to part-time jobs) must go hand-in-hand.

A key question in the US is why caseloads did not rise, even when unemployment rose and jobs became less available. It is possible that the message to “get off welfare” and the warnings about time limits and sanctions were so strong that even women who might have been able to return to welfare were reluctant to do so when they lost their job in the early 2000s. But the recession of 2001 in the US was concentrated in manufacturing and traded goods (sectors of the economy that employ a disproportionately large number of male workers) and in the high-tech collapse (largely affecting more skilled workers). Less-skilled women were concentrated in the retail and service sector, and these sectors were less affected. As a result, many welfare leavers were probably able to hold onto their jobs. A deeper recession, or an economic slowdown with greater effects on the retail and service sector, might have driven many more single mothers back to the welfare office.

Fourth, the flexibility and variability of the US federalist system was important in making this welfare reform both politically palatable and administratively do-able. While states were under mandate to increase employment levels among welfare recipients, they had no centralized directions for how to do this. Furthermore, they had adequate funding to implement changes. (The block grant funding levels from the federal government were fixed. Since caseloads fell rapidly in all states, this gave states money to use for work programs.) The result was that most states embraced the opportunity to create their own welfare programs. Many state governors and legislators (and often county and city officials as well) became quite invested in designing new systems. The resulting sense of ownership over these newly-reformed welfare programs was almost surely important in their effective implementation. In contrast, a more centralized one-size-fits-all mandate to run particular types of work reforms could have hit significant administrative resistance at the state and local level, and would have been implemented much less quickly and effectively.

With 50 different state welfare programs, the level and type of support received by single mothers on welfare or leaving welfare varies enormously across the country. For the US, where historical suspicion of centralized social programs is long-standing and where national commitment to equity is weaker, this devolution of program responsibility to the state level worked well. In other nations, greater central-

ization might be more effective although I suspect that any effective job placement and assistance program must have some local ownership and flexibility embedded in it.

Finally, I want to underscore the importance of being clear about the goals of welfare-related policy changes. In the US, reforms focused on getting welfare recipients into work, with little attention to poverty reduction. The public debate revolved around the value of work in the lives of adults and the value of working adults as role models for children. In contrast, the recent British reforms have focused on a goal of reducing child poverty. It is perhaps not surprising that the US reforms had more mandatory work policies (often with punitive aspects), while the British reforms have more incentive programs that provide income subsidies to low-income families.

Low-wage and less-skilled workers, particularly single parents, often face inherent difficulties in stabilizing their economic lives. Jobs may turn over; earnings may not be enough to cover family needs; family demands may lead to more frequent job leaving. In this environment, welfare to work programs make sense only if one believes that engagement in the mainstream economy has value, even beyond its immediate economic returns, helping provide women with a sense of contribution, and even of identity. And one needs to believe that for at least some of these women, initial low-wage jobs will lead to growing income over time that provides more economic stability.

Within the US there is a strong belief in the value of work in peoples' lives. There is also evidence suggesting that the average less-skilled worker who is able to keep and hold a job does experience wage and income growth. But some subset of low-wage workers – and particularly single mothers with small children – have difficulty holding a stable job and are not able to escape poverty through work alone. Hence, on-going attention to subsidies for low-wage work is important to these families.

Over the past 15 years, US welfare policies have become much more focused on supporting low-wage work than on providing financial support outside of work. Furthermore, the US experience suggests that a relatively high share of less-skilled single mothers are able to find and hold jobs, when such jobs are available and when they have the incentives to do so. While some women were able to leave welfare and

escape poverty, the share of those who are both working and poor has risen in the US. This is probably exactly what a work-based welfare system should expect to accomplish. Other countries may be less committed to the value of work, however. And the economic structure of other countries may make wage growth and job advancement in the low-wage labor market more difficult. In these situations, the value of welfare-to-work programs may be lower.

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## WELFARE REFORM, WORK AND WAGES: A SUMMARY OF THE US EXPERIENCE

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### Background

Welfare programs confront policy makers with tradeoffs among conflicting objectives. Programs that alleviate need among the poor can lead to dependency. Desires to promote work in order to reduce dependency must confront the fact that benefits must fall as earnings rise unless the program is to be universal. This creates a work disincentive.

Starting in the 1960s, US policymakers struggled to fashion a program of cash assistance that would alleviate need among the poor while promoting work and limiting dependency. By the early 1990s, a series of reforms focused squarely on promoting work and limiting aid. Here we describe briefly the policy reforms that were geared toward promoting work and the empirical evidence of the effects those reforms had on employment. Much of this material is drawn from our forthcoming book, which goes into more detail and covers a much broader range of outcomes (Grogger and Karoly in press). One topic not discussed there, however, is how welfare reform affected wages. Here we discuss the limited evidence on wage effects and the importance of wages for determining the terms of the tradeoff among different policy objectives.

Prior to the passage of the Personal Responsibility and Work Opportunity Restoration Act of 1996 (PRWORA), the primary US welfare program was called Aid to Families with Dependent Children (AFDC). Like welfare programs everywhere, AFDC

was available only to the poor. Unlike such programs in many countries, AFDC was intended primarily for single parents with co-resident children, with 93 percent of all aid going to families headed by single mothers. AFDC was an entitlement program, meaning that aid had to be provided to all eligible families who sought it. Funding was shared between the federal government and the states. The states set benefit levels, which varied widely. Despite differences in benefit levels, recipients in all states faced the same implicit tax rate when they went to work. The statutory tax rate was 100 percent after four months of work, which provided a clear disincentive for recipients to work.

In response to rising caseloads and concerns about employment disincentives and the effect of AFDC on family structure, several states sought and received permission to change their welfare programs beginning in the early 1990s. Momentum for nationwide reform gained steadily until the passage of PRWORA in August 1996. PRWORA ended the entitlement status of the welfare program and replaced AFDC with Temporary Assistance for Needy Families (TANF). It gave states leeway to change their programs in ways not possible under AFDC. Many of the changes undertaken by the states were designed to promote work.

### Major policy changes during the 1990s

During the 1990s, the states changed their welfare programs in ways that are literally too numerous to mention. Of all the policy changes, financial incentives, work requirements and time limits probably had the greatest effect on work behavior. We discuss each in turn.

#### *Financial incentives*

Whereas AFDC imposed high tax rates on recipients' earnings uniformly across the country, states now differ a great deal in the rate at which they reduce recipients' benefits as their earnings grow. A few have maintained the old AFDC tax structure, but most have adopted lower tax rates. Connecticut

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has the most generous financial incentive in the country, allowing recipients to keep their full benefits until their earnings exceed the federal poverty line, which amounts to \$1,268 per month for a single parent with two children as of 2004.

Financial incentives provide an incentive for non-working welfare recipients to begin working. However, because they involve conflicting income and substitution effects, their effects on hours of work are more complicated.

#### *Work requirements*

Work requirements mandate that recipients work – or engage in “work related activities” – as a condition for receiving aid. Not surprisingly, theory predicts that such requirements should increase employment among welfare recipients. The extent to which they increase work may depend on the nature of the welfare-to-work program, according to which non-working recipients satisfy their work requirement. During the 1990s, states largely replaced their skills-focused programs, which stressed education and training, with placement-focused programs, which stressed search and rapid employment. Placement-focused programs may have greater effects in the short-run, while skills-focused programs occupy their students with classroom activities. If those classroom activities impart valuable skills, however, skills-focused programs could boost wages and result in larger long-run effects.

#### *Time limits*

Time limits represent the most radical departure from past welfare policy. Whereas AFDC allowed families to receive aid as long as they remained eligible, federal TANF funds cannot be used to provide benefits for more than 60 months over the recipient’s lifetime. Many states have adopted even stricter time limits. Time limits could have both behavioral and mechanical effects. Behaviorally, time limits provide consumers with an incentive to bank their benefits for later use, even before the time limit becomes binding (Grogger and Michalopoulos 2003). This behavioral response may also increase employment. Once the consumer exhausts her benefits, she may be removed from the welfare rolls. This should mechanically reduce welfare receipt, but its effect on employment is indeterminate.

## **Data**

Theory predicts that all of the major reforms described above should increase employment. To test these predictions, we assembled data from 35 studies of the effects of specific welfare reform policies or welfare reform as a whole on employment. Among these studies, 29 are experimental and 6 are observational.

The experiments involved random assignment of welfare recipients to treatment and control regimes, where the control regime was AFDC and the treatment regime involved one or more of the reforms described above. We classify the experiments according to their major reform or combination of reforms. The observational studies typically involved analyses of data on welfare-prone populations, such as single mothers, from nationwide samples such as the Current Population Survey. The effects of welfare reform are identified in these studies largely from differences in the timing and nature of the states’ reform policies, either specific reforms – namely financial incentives and time limits – or reform as a bundle. All of the studies whose results we tally included state dummies in an attempt to capture unobservable differences between the states that may influence both welfare policy and employment. Likewise, all included a state-level measure of economic performance in an attempt to distinguish the effects of the economy from the effects of welfare reform. Finally, these studies included controls for year effects in order to capture nationwide trends in factors that may have influenced employment among at-risk groups, such as negative media portrayals of welfare.

## **Results**

The Table presents a tally of the qualitative results from experimental and observational studies of the effect of specific reforms or reform as a bundle on employment.<sup>1</sup> We think of these as reflecting the short-run effects of welfare reform, because the experimental results are based on roughly two years

<sup>1</sup> These are the same studies whose quantitative results are discussed in Chapter 6 and whose qualitative results are tallied in Chapter 10 of Grogger and Karoly (in press). Note that some studies contribute more than one count to the results in the Table. Some experimental studies examined employment impacts for two populations: longer-term welfare recipients and recent welfare applicants. A few observational studies estimated effects of more than one specific reform policy or both a specific reform policy and reform as a bundle. Two experimental studies contribute experimental results for reform as a bundle, as well as observational results for the mechanical effect of time limits.

**Qualitative impacts of welfare reform policies on employment:  
Results from experimental and observational studies**

Policy reform	Source	Negative impact		Zero	Positive impact	
		Signif.	Insig.		Insig.	Signif.
Financial incentives	E	–	–	1	1	1
	O	–	–	–	–	1
Work requirements	E	–	1	–	3	9
Financial incentives combined with work requirements	E	–	–	–	3	9
Time limits (behavioral)	O	–	–	–	–	3
Time limits (mechanical)	O	–	2	–	–	1
Reform as a bundle	E	–	–	–	2	4
	O	–	–	–	–	3

Note: E = Experimental studies; O = Observational studies. Statistically significant results are those with  $p < 0.10$  or better.

of follow-up data and the observational studies rarely include more than two or three years of post-reform data. The theory discussed above predicted that all of the major reforms should increase employment, and by and large, the theory is borne out by the data. Of the 44 estimates reflected in the Table, 40 are positive. Of the four that are not positive, two pertain to the mechanical effects of time limits, about which theory has the least to say. Among the 40 positive estimates, 31 are statistically significant at the 10 percent level or better. This is many more than one would expect by chance.

Not reflected in the table are some important qualifications. First, the quantitative effects of these reforms are generally modest in magnitude. The studies typically show that reform raises employment by roughly 5 to 10 percent. This is not a trivial amount, but neither can it be said to represent a fundamental change in behavior. Second, there is some evidence that these effects fade out over time. Eleven of the experiments that focused on work requirements provide five-year follow-up data. In the first two years of these experiments, work requirements increased employment by an average of 4.8 percentage points. By the last two years, the average effect had fallen to 2.0 percentage points.

### Policy tradeoffs and the importance of wages

One way to summarize the results in the Table is that almost any reform undertaken led to increases in employment, albeit modest increases that may not have lasted too long. This provides some policy guidance. It shows that, since modest employment gains can be achieved from any of a number of policies, the

real tradeoff policy makers face is between alleviating need and limiting dependence. In Grogger and Karoly (in press), we show that financial incentives raise incomes, but that they also raise welfare use, since they give consumers an incentive to combine work and welfare rather than leave welfare altogether. We also show that time limits and work requirements reduce welfare receipt, but have little if any effect on the mean incomes of recipients. Thus the policy tradeoffs involve financial in-

centives, which raise employment and incomes at the expense of higher welfare receipt, versus time limits or work requirements, which raise employment and reduce welfare receipt but have little salutary effect on income.

Two further questions follow from these results. The first is, what would be needed to make the short-term employment gains seen above last longer? The second is, what would be needed to lessen the terms of the tradeoff between the conflicting goals of alleviating need, limiting dependency and promoting work? The answer to both involves wages.

If welfare reform were to raise recipients' wages, then short-term employment gains should persist into the future, since higher wages make employment more attractive. Furthermore, positive wage effects can ease some of the short-term policy tradeoffs between alleviating need, limiting dependency and promoting work. If the wages of recipients rise with work experience, then policies that promote work may have favorable effects on earnings over the long-term, even if they have no such effect in the short term. Thus work requirements and time limits could eventually raise earnings and income, in addition to reducing welfare receipt and raising employment immediately. Similarly, the short-term increase in welfare receipt that stems from financial incentives may eventually dissipate, if wage growth eventually leads recipients to leave the welfare rolls altogether.

The key question is whether reform raises wages. Conceivably, it could do so either directly or indirectly. If welfare-to-work programs raised recipients' productivity, for example, by providing additional education or training, the result could be higher wages. However, most states implemented place-

ment-oriented welfare-to-work programs during the 1990s, so direct productivity effects seem unlikely.

Welfare reform also could raise wages indirectly by increasing employment, if welfare recipients enjoy positive returns to work experience. This question is surprisingly controversial. Although human capital theory predicts that wages should rise with experience, there is mixed evidence on whether low-skill workers such as welfare recipients enjoy the same returns to work experience as their higher-skill counterparts.

Among studies that focus on the low-skill population generally, results vary depending on how one measures experience. Studies that employ a traditional potential experience measure, typically defined as age minus education, generally report little if any return to experience (Burtless 1995; Moffitt and Rangarajan 1989; Pavetti and Acs 1997). Studies that employ a measure of actual experience, that is, the number of months or years of work experience since the worker finished school, report returns more comparable to those observed among more general samples of workers (Gladden and Taber 1999; Loeb and Corcoran 2001).

However, four recent studies that analyze the actual experience of welfare participants report conflicting estimates of the return to experience. Grogger (2005) analyzes data from the four-year follow-up of the Florida Family Transition (FTP) program. He estimates that former welfare recipients enjoy returns to experience of roughly 5.6 percent per year. Zabel, Schwartz and Donald (2004) analyze data from the 18-, 36-, and 54-month follow-up surveys of the Self-Sufficiency Project (SSP). They estimate returns to experience between 7.3 and 9.6 percent. In contrast, Card, Michalopoulos and Robins (2001), who analyze data from the 36-month follow-up of SSP, estimate returns between 2 and 3 percent. Finally, Card and Hyslop (2004, 15) report that “work experience attributable to SSP appears to have had no detectable effect on wage opportunities” based on an analysis of data from the 54-month follow-up.

Why these estimates differ so widely is not clear. Three of the studies are based on data from the same demonstration project, which one might expect to increase the similarity of their results. At the same time, they employ different approaches to deal with self-selection into employment and different methods to handle the potential endogeneity of work

experience. Given the importance of the question they address, further research into the differences between these studies would be useful.

Even if welfare recipients enjoy returns to experience similar to those observed among higher-skilled workers, there remains the question of whether the experience gains that result from welfare reform are enough to spur meaningful wage growth. FTP increased experience by about three months over a four-year period (Grogger 2005). SSP raised experience by about four months over five-and-a-half years (Card and Hyslop 2004). Even if the return to experience is 7 percent, employment gains along these lines (which are fairly large by the standards of the experimental literature) would translate into small wage gains. Put differently, in order for wage growth to ameliorate the trade-offs among the conflicting goals of welfare reform, reform would have to result in much larger employment gains than we have generally observed.

## Conclusions

Raising employment is a key objective of many welfare policy makers around the world. Economic theory predicts that it should be possible to raise work effort either using “sticks”, such as work requirements and time limits, or “carrots”, such as financial incentives. Results from dozens of welfare reform studies largely bear this prediction out.

At the same time, those studies reveal that the magnitude of those effects tends to be modest. This finding has important implications, particularly for the long term. Policy reformers often speak of work as first step toward a “virtuous cycle” by which recipients eventually leave the welfare rolls. The idea is that increased employment leads to higher wages, which in turn result in greater work effort and eventually higher incomes. In order for the virtue to start cycling, however, today’s work must generate tomorrow’s wage gains. This, in turn, requires that wages grow with experience and that experience grows enough to generate meaningful wage gains.

Recent work has provided mixed results regarding the return to experience facing low-skill workers such as welfare recipients. Perhaps more importantly, the experience gains generated by welfare reform experiments seem unlikely to lead to substantial wage gains, even if the return to experience is high.

Relying on increased experience alone is likely to result in only limited wage gains. Thus, with the prospects for substantial wage growth in doubt, the policy tradeoffs between alleviating need, limiting dependency and promoting work can be expected to dominate future welfare reform debates.

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## WORKFARE\*

IVAR LØDEMEL\*\*

This paper provides a brief introduction to activation programmes described as workfare, their background, variation in design and implementation in six European countries (Denmark, France, Germany, Norway, The Netherlands and The United Kingdom) and the United States (California, Wisconsin and New York City).<sup>1</sup>

### From passive to active policies

The last decade of the twentieth century witnessed the development of a fundamental challenge to welfare as a modern project. Attention shifted from debates about the level of welfare expenditure to questions about the desirability and usefulness of welfare pay-

ments, and as a result selectivity and targeting within social assistance are now being restored as desirable features of welfare provision (Lødemel 1997). This new orientation was applied to a range of welfare programmes, but was particularly focused on social assistance provision for people who were judged to be available for work.

Changes in the organisation of working life and the threat of rising welfare expenditure in a climate of increased global competition has led to a desire to make the welfare state more effective in terms of limiting spending and improving outcomes. Nowhere was the spending reduction objective clearer than in the US where welfare provision arrangements underwent a revolution in the mid-1990s. A cross-party consensus developed around the ambition of “ending welfare as we know it”, so that the Republican and Democratic parties only differed in the extent to which they supported the balance of measures to achieve change. In north-western Europe support for some form of welfare provision has proved more solid, and a willingness to depart from established principles regarding rights to welfare is less evident. However, on both sides of the Atlantic a new “wisdom” regarding the role of welfare has emerged.

The new wisdom incorporates the view that traditional cash benefits fail to support a proportion of recipients in becoming self-sufficient. European and American policy makers began to turn to new policies which seek to improve the skills and capabilities of jobless people who have been unable to find work and attempt to reduce disincentives to take on work (Heikkila 1999). This paper focuses on one part of the new policies: those that oblige social assistance recipients to work as part of the assistance contract.

### Defining workfare

Workfare constitutes a specific type of activation, and as an ideal type it can be viewed as a form that places particular emphasis on disincentives in the form of the threat of sanctions (Hvinden 1999; Abrahamsen 1998). At present, no consensus regarding the definition of



\* Workfare: Towards a New Entitlement or a Cost-cutting Device Targeted at Those Most Distant from the Labour Market?

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<sup>1</sup> This paper draws on material from the EU-funded project “Social Integration through Obligations to Work? Current European Initiatives and Future Directions” (Lødemel and Trickey 2001, Lødemel 2002), which describes the situation in each nation in 2001. At present, no comparative material that could facilitate a systematic discussion of developments after that date is available. A rudimentary reading of recent literature shows that in most countries the nature of activation is undergoing important changes. Examples of recent changes to national policies are as follows: In Denmark: after the present right-wing government took office in 2001, the focus has shifted from a strong focus on social integration towards a greater emphasis on disciplining. Germany: As of January 2005 benefits for able-bodied (former) social assistance recipients has merged with benefits for the *uninsured* (former) recipients of unemployment benefits. The introduction of this reform has resulted in a spread of more “workfare-like” policies in Germany. This has taken two forms. First, the compulsory activation programmes for recipients of social assistance are now more universally applied and sanctions play a greater role in the system. Second, the unemployed groups (uninsured) previously not targeted by this form of activation, currently receive the same treatment as social assistance recipients (Ochel 2005). Norway: here we find an opposite development to that of Germany. Social assistance recipients are increasingly incorporated into active labour market programmes traditionally designed for the insured unemployed. Britain: Recent developments in the New Deal for young people suggest a move towards a stronger emphasis on personalised services, focusing more on individual problems and resources, thereby (perhaps) moving it even further away from an idealised model of workfare. US: Recent developments include a stronger role of sanctions (as compared to activation) and a stronger emphasis on work (“work-first”) as compared to human resource development (Handler 2004). This may suggest that the US have moved further in the direction of an idealised workfare model than we can see from the comparative material presented in this paper.

workfare exists. In order to carry out a first international comparison of such programmes, the research group responsible for the study from which this paper is hewn therefore needed to develop a shared definition which could be used for delineation and comparison: *Programmes or schemes that require people to work in return for social assistance benefits* (Lødemel and Trickey 2001).

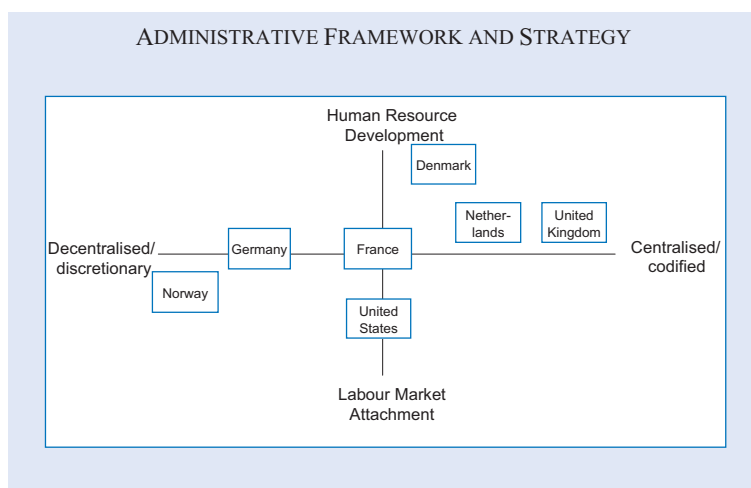
The definition has three elements – that workfare is compulsory, that workfare is primarily about work, and that workfare is essentially about policies tied to the lowest tier of public income support. Each of the three elements influences the way social assistance is delivered. Used in combination, the introduction of work and compulsion tied to the receipt of aid represents a fundamental change in the balance between rights and obligations in the provision of assistance.

A crucial question for future development is therefore the extent to which workfare will represent first and foremost a curtailment of pre-existing rights or whether it may have the potential of providing a new form of entitlement in addition to financial support. Because the definition sets out an “ideal type” it becomes possible to examine the extent and direction of divergence in national programme development.

### Types of workfare

Based on the systematic comparison of programme differences in aims, target populations, administrative framework and divergence from an idealised workfare model (LMA)<sup>2</sup> towards greater emphasis on a human capital development approach (HCD) and on “tailored” programmes, the group of researchers were able to identify a three-nation group of programmes with shared characteristics, while the programmes in the four other nations were less easily grouped (Figure). The Y-axis is based on a qualitative assessment of the ideological underpinnings –

<sup>2</sup> In the Figure expressed as Labour Market Attachment (LMA). The programmes included in the comparison were: Denmark: Activation; France: RMI-based insertion; Germany: Help Towards Work; Netherlands: Jobseeker’s Employment Act for Young People; Norway: Local authority based workfare schemes following the 1991 Social Assistance Act; United Kingdom: New Deal for Young People; United States: State programmes following from PRWORA, but, represented by programmes for TANF recipients operating in California, New York City and Wisconsin.



from integrative to preventive – while the X-axis shows the extent to which programmes are centralised in terms of funding, legalisation (discretionary versus more entitlement based) and the extent to which programmes are integrated with active labour market policies (ALMP) targeted at the insured.

The first group might be labelled “European centralised programmes”. These Danish, Dutch and British programmes are underpinned by an ideology which supports “integrative” as well as “preventive” aims. These programmes have a broader target population, are more visible and so aim to appeal to a broader electorate. A key element is their “universal” rather than “selective” status. The centralised programmes tend to have a wide range of placement options available, including options which emphasise “human capital development” as well as “labour market attachment”. In the Figure the most centralised programmes are situated within the top right hand corner (centralised, and with an emphasis on human resource development). This reflects a strong funding base enabling more resource intensive forms of assistance. These programmes diverge strongly from the idealised definition of workfare and features elements which may suggest that they provide participants with new resources in their struggle to (re)enter the labour market.

The more decentralised policies focus less on human resource development and more on prevention and other aspects associated with the LMA-approach. These are, however, less easily typified compared with the cluster presented above. The German programmes feature strong national variation but are in general decentralised and segregated from programmes targeted at the insured. The quality and number of placement options varies substantially, but the overall assessment found these programmes to focus more on pre-

vention and less on human resource development compared with the first three sets of programmes presented above. The French programmes were less easily placed. While the ideological underpinning was clearly integrative, these aims were not reflected in the strategy of programmes. The most decentralised programme – Norwegian Workfare – also demonstrates the relationship between centralisation and other factors in a decentralised, broadly preventive-oriented programme with a strong focus on labour market attachment objectives.

Given that the US programmes are often presented as a model for workfare delivery, the differences between US and European centralised programmes are important. The US programmes described here combine a moderately centralised approach with an emphasis on preventing claims rather than integrating clients; labour market attachment rather than human resource development; a limited range of short-term solutions; and strong sanctioning policy. The difference is certainly linked to the strong individual-focused ideology behind US welfare policy making.

The fact that many workfare policies are currently undergoing rapid transition suggests that the groupings presented above may already have altered (see fn. 1)

### **The extent of policy diffusion and convergence**

The rapid spread of a new emphasis on matching entitlement to obligations in the provision of social assistance may have been facilitated by the diffusion of ideas from the US to policy makers in the six European countries studied. Diffusion is therefore a possible explanation for the introduction of similar programmes in several European nations within a relatively brief time period. However, if we look beyond the introduction of compulsory participation at the extent of possible qualified convergence, our findings suggest that the cross-Atlantic diffusion of ideas has not been matched by the import of US-style programmes in Europe. This is perhaps best exemplified by the UK where the influence from the US has received the greatest political and academic attention. We found, however, that programmes in these two nations differed substantially, with the UK following an integrative strategy, while US programmes were more focused on preventing claims for financial assistance. Further studies into the diffusion of workfare programmes may find it more

fruitful to look at intra-European processes of policy transfer. The identification of a cluster of similar programmes in Denmark, the Netherlands and the UK in 2001 may provide an interesting case for future studies of geographical diffusion.

The impression that there is divergent development between the programmes of the two English-speaking countries considered here is further strengthened when we look at the programme effects of introducing workfare. Among the seven nations considered, the impacts of these changes were greatest in the US and the UK. In spite of widespread assumptions about the diffusion and the shared departure from previous entitlements to assistance with few conditions attached, these two countries pursue very different strategies in their workfare programmes. This suggests that similarities in the degree of centralisation may not result in a convergence in the content of the new workfare programmes. The strong divergence of the two programmes in the Nordic model reiterates this. However, the possible qualified convergence found between the social assistance schemes of the UK, Denmark, and the Netherlands has resulted from both a shared strategy to workfare and new similarities in the administration of social assistance.

Because the workfare programmes target only a proportion of social assistance recipients, the new convergent changes in administration caused by the programmes may not have greatly altered the social assistance regimes as they were described in the mid-1990s. Our findings indicate, however, that the previously centralised schemes are now more local, less entitlement based and more cash-care multifunctional. With the possible exception of the Dutch and Danish schemes, the introduction of workfare may therefore be part of a convergence towards a model of a local and cash-care multifunctional social assistance previously associated mainly with the Nordic countries (Gough et al. 1997). The deviation from previous similarities and the variation in social assistance can perhaps be best summed up as new diversity (Enjolras and Lødemel 1999). If this is the case, we need to reassess the social assistance typologies (or regimes) as they were described in the 1990s. Jessop (1993) predicted a convergence towards a “Schumpeterian workfare state” and considers the spread of workfare as defined here to be an important part of this convergence. If we accept Jessop’s description of wide-ranging changes in “the model of regulation”, which involves a departure from the welfare states as we have known them, it should not



come as a surprise that diversity is the result. There is little to suggest that the “Schumpeterian workfare state” (Jessop 1993) should engender more similarities than those systems of welfare existing under the former Keynesian or Fordist models of regulation.

### Does workfare work?

On the political level, the aims of the workfare programmes are multiple: to cut costs, increase self-sufficiency, prevent social exclusion and to enhance employment. A review of effect evaluations found that two outcomes are most frequently measured: earnings and transitions to employment. Whereas earnings are more frequently measured in the US, most European studies focus on employment effects.<sup>3</sup>

Although the available evidence is suggestive rather than conclusive, many European studies indicate that workfare programmes have a positive employment effect, and, where this is measured, also increased earnings after participation. Because studies often find that participants have multiple barriers to the labour market, it is also important to note that many go on to other ALMP-schemes (which in turn may aid their transition to work), or they become entitled to other social security benefits after participation has facilitated improved insight into and documentation of their health problems.

Several studies point out that job training in private firms or activation similar to ordinary work is the most promising approach to increase employment. Those with placements in private sector jobs stand a better chance of entering regular employment than those in the public sector. This is important because most European programmes are oriented highly to the public sector.

Some participants, usually the young, people with higher educational levels and those with less social problems seem to benefit more from participation in activation programmes than others. In addition, being activated seems to encourage younger people to take up ordinary education.

In several programmes there seems to be a “creaming” of participants: Welfare officers select participants who are most likely to obtain regular work after leaving the program. Thus, it is likely that a num-

ber of these participants might have found a regular job on their own, without the effort of public agencies.

In spite of the compulsory nature of programmes a majority of participants articulate satisfaction with the programmes. Increased confidence, well-being and education/work opportunities may result from both the programmes themselves or from the increased contact with other people. Programmes therefore show a potential for improving both human- and social capital.

A striking cross-Atlantic difference in research was documented in our systematic review of studies. While solid effect evaluations are seldom used in Europe, the evidence is generally much stronger in the US where numerous large-scale randomised controlled trials (RCTs) have been conducted.

Although our review suggested some positive effects in the six European nations, other crucial dimensions are seldom addressed here. Among these are programme effects on poverty; differences between programmes which are voluntary or compulsory, selective or universally applied to the target group; and “created work” programmes with few options versus individually tailored programmes which include different options based on systematic mapping of barriers and resources among participants. Also, few studies focus on the long-term effects of participation, as well as the undesired effects of dropping out and possible further marginalisation as a result of the requirement to participate.

### Conclusion

This first comparative study used an ideal-type definition of workfare. Our evidence showed that this definition of workfare only applies to some of the programmes considered.

This discussion has also highlighted two different developments which may impact on the way workfare will develop in the future. On the one hand, the clientele targeted by workfare is likely to be more distant from the labour market in the future. At the same time, a tendency towards a stronger human capital approach in some of the countries studied may suggest that future programmes will be better tailored to the needs of these groups.

On both sides of the Atlantic we are witnessing a redirection of welfare provision with the aim of fur-

<sup>3</sup> This discussion is limited to European studies. This review was made in 2000.

thering integration and inclusion. At the moment we can distinguish between two different experiments taking place. In Europe – particularly among the European centralised programmes – the experiment involves a move away from entitlement to unconditional aid and, perhaps, towards a new kind of entitlement more suited to the risks and changes in modern society (Leisering and Walker 1998). In the US the experiment is more dramatic. By combining an end to entitlement and an accompanying emphasis on compulsion and harassment rather than help, this nation is the first to follow the advice provided by Malthus more than two centuries ago: “If welfare is the root of exclusion, the best way to inclusion is to do away with welfare”. It will take time, and more long-term evaluation will be necessary before we can begin to assess the success of either experiment. Evaluation in this case depends on the extent to which this strategy succeeds in providing individuals with real and new opportunities. For workfare policies to be successful, they need to compensate for providing “less” in a traditional sense, by providing “more” in this new sense.

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## HARTZ IV – WELFARE TO WORK IN GERMANY

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The need to reform the labour market in Germany is urgent. With the enactment of the “Hartz laws” (named after the chairman of the reform commission) the federal government has introduced fundamental reforms in some areas of the labour market. The government is thereby aiming at an increase in employment and, particularly, at a reduction of long-term unemployment. The labour market reforms are meant to “activate” recipients of social benefits. The guiding principle is the well-known “right-and-duty” principle.

The labour market reforms include the establishment of temporary work agencies for the previously unemployed (“Personnel Service Agencies”), the introduction of a subsidy for setting up a one-person company (“Me Inc.”), new regulations for low-paid employ-

ment (“mini” and “midi jobs”) as well as the restructuring of the *Bundesagentur für Arbeit* (Federal Labour Office) to become a service-oriented institution. Restructuring involves reorganising the placement of job seekers by increasing the use of private employment services and by intensifying counselling (“Hartz I-III”). In addition, two major benefit programmes, unemployment insurance and social assistance, are being reformed. This is being done by combining unemployment assistance and social assistance to form a new “unemployment benefit II”, by increasing earnings disregards for welfare recipients, by imposing sanctions for those who refuse an acceptable job offer, etc. (“Hartz IV”), as well as by shortening the period in which the (contributory) “unemployment benefit I” can be received (Table 1).

### The old system of unemployment insurance and social assistance

Until the end of 2004 there was a three-pronged system in Germany which provided protection against the risk of becoming unemployed and other income risks. In this system, unemployment benefits were part of a compulsory form of insurance financed by contributions. The benefits for the unemployed with at least one dependent child amounted to 67 percent

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Table 1

#### “Hartz laws”

Law	Passed	Measures	Effective as of
First law for modern services on the labour market (“Hartz I”)	December 2002	Setting up Personnel Service Agencies	1 January 2003
Second law for modern services on the labour market (“Hartz II”)	December 2002	Introduction of one-person companies (“Me Inc.”); Reform of low-paid jobs (“mini” and “midi jobs”)	1 January 2003 and 1 April 2003
Third law for modern services on the labour market (“Hartz III”)	December 2003	Restructuring of the Federal Labour Office	1 January 2004
Fourth law for modern services on the labour market (“Hartz IV”)	December 2003	Unemployment assistance and social assistance combined to form unemployment benefit II; new definition of acceptable jobs, sanctions; increased earnings disregards; community service	1 January 2005
Law to reform the labour market	September 2003	Duration of unemployment benefit I shortened	1 February 2006

Source: [www.bundesregierung.de](http://www.bundesregierung.de).

of the earlier net income and to 60 percent for those without children. Unemployment benefits were paid without any means test. The maximum duration of benefits was between 6 and 32 months, depending on age and the period covered by contributions. After this period, means-tested unemployment assistance was paid for an unlimited period of time. Unemployment assistance was financed via taxes. The benefit amounted to 57 or 53 percent for recipients with and without children, respectively. Social assistance provided the basic welfare net. Again, benefits were means-tested and paid for an unlimited period of time. Social assistance benefits were only paid if the individual seeking help was unable to help himself and no other welfare benefits were available.<sup>1</sup> As the comparison shows, unemployment assistance had an intermediary position between unemployment benefits and social assistance. As with unemployment benefits the amount of unemployment assistance depended on the last net earnings. However, because of the unlimited entitlement together with a means test, it was a second form of basic welfare benefit, as is underlined by the fact that it was financed by taxes instead of contributions.

This system of unemployment insurance and social assistance has contributed in an important way to the high unemployment in Germany, especially among poorly qualified workers. There is fairly clear micro evidence that a longer benefit entitlement leads to longer unemployment duration (Nickell et al. 2005). As was shown above, the duration of unemployment benefits was long and payment of unemployment assistance was even unlimited. Furthermore, the level of benefits has a negative effect on the transition from unemployment to employment because high benefits are connected with high reservation wages. Since companies are not willing to pay high wages to take on workers with low performance, unemployment becomes permanent. At the end of 2004, the effective net replacement rate for recipients of unemployment assistance (including additional benefits for the recipient and, if necessary, other household members) was approximately 80 percent for a single and about 90 percent for a single parent (Breyer et

al. 2004, 32). Social assistance (including housing assistance) amounted to 65 percent of average net earnings for a family with one gainfully employed parent and two children in Western Germany (Sinn et al. 2003, 14). Compared with net earnings derived from low-wage employment the net replacement rates were even higher.

In the end, the incentive to take on a job depends on the additional net income it would provide. Recipients of unemployment assistance who did not work longer than 15 hours a week could earn up to an additional EUR 165 per month. Net income above that was completely set off against unemployment assistance. With social assistance benefits, earned income up to 25 percent of the normal rate of benefits (EUR 74 monthly) was not set off against social assistance. Thereafter the rate by which transfers were reduced amounted to 85 percent. That means that the income available to social welfare recipients increased by a mere 15 percent of the additional earned income. A net earned income over EUR 568 led to a transfer reduction rate of 100 percent (Sachverständigenrat 2005; Box 16). For the recipients of unemployment and social assistance the high rates of transfer reduction show that the incentive to earn additional income was minimal.

The growth in the number of unemployed is shown in Figure 1. During the 1960s, average annual unemployment was less than 200,000 persons. Thereafter unemployment increased from one economic downturn to the next. In 2004 an average of 4.4 million people were unemployed, many of them for the long term. Part of this problem was caused by German unification. But a considerable percentage of unemployment, specifically of persons with minimal qual-

**Figure 1**



<sup>1</sup> In 2003 2.02 million people received unemployment benefits, 2.03 million unemployment assistance, and 2.81 million social assistance.

ifications, can be attributed to the effects of the German welfare system. Figure 1 shows that of the persons registered as unemployed in 2004, approximately 34.3 percent have not completed vocational training, this figure being the mean between the Western German level of 41.1 percent and the Eastern German level of 20.6 percent. The proportion of employable individuals without vocational training is 17 percent in Western and 8 percent in Eastern Germany. Thus, the specific rate of unemployment for persons without vocational training is 21.7 percent in Western Germany and 51.2 percent in Eastern Germany (Reinberg and Hummel 2005).

#### **An overview of “Hartz IV”**

The core area of the labour market reforms of the Social Democrat–Green Party coalition government includes the measures put into effect by “Hartz IV” (and the complementary shortening of the period in which contributory unemployment benefits can be received). As mentioned above, these measures aim at activating recipients of unemployment benefits and are based on the “right-and-duty” principle.

Starting from February 2006, the period in which unemployment benefits can be received will be shortened for the unemployed up to 55 years of age to 12 months and for those over 55 to at most 18 months. With this law Germany is approaching the regulations that exist in most of the OECD countries. Shortening the period during which unemployment benefits can be received is in line with research findings for Germany according to which long-term unemployment will be reduced by this measure (Steiner 2003).

Starting from January 2005, unemployment assistance and social assistance were combined for people able to work to form unemployment benefit II. The new benefit is means-tested, the benefit level being similar to that of the old social assistance benefit. Individuals who are unable to work will continue to receive social assistance. For recipients of unemployment benefit II there are no limits as to what jobs are acceptable. If a recipient rejects a job, he will have to face sanctions in the form of a reduction of unemployment benefits for a limited time. At the same time, earnings disregards have been increased in order to make it more attractive to take on work.

If it is not possible to integrate benefit recipients in the regular labour market, community jobs will be

offered to them, as could be done in the past on the basis of the federal social assistance law (“help to work”). These jobs may include, for example, activities to improve the social infrastructure at the municipal level. Recipients of unemployment benefit II will receive compensation for their extra expenses in connection with this work (Koch and Walwei 2004).

#### **Unemployment benefit II: the new safety net for job seekers**

Since January 2005, those in need of help who are able to work and cannot claim unemployment benefit I receive, as explained above, unemployment benefit II. Apart from housing and heating assistance, responsibility for unemployment benefit II lies with the Federal Labour Office. It is financed by the federal government. Within the scope of an experimental clause, some municipalities are allowed to take over the responsibility for all the tasks connected with operating the basic safety net for job seekers. Granting social assistance to those unfit for work continues to be the responsibility of the municipalities (Löschau 2005).

Individuals are considered able to work if they are capable of working for three hours a day under the usual conditions of the labour market and will not be hindered to do so in the foreseeable future because of illness or handicap. The individual working ability is evaluated purely from a medical standpoint. It is decided by the institution responsible for the safety net, i.e., usually the local employment office.

An individual is needy if he/she is unable to earn a living for him/herself and for the other family members living together in one household. The individual in question is required to take on an acceptable job and use his own income and assets as well as that of his/her partner. There are, however, allowances; certain assets are not taken into account at all (Bundesministerium für Wirtschaft und Arbeit 2004).

The monthly standard payment for unemployment benefit II amounts to EUR 345 in the first 6 months of 2005 for singles or single parents in Western Germany (including Berlin) and EUR 331 in Eastern Germany. For children the standard payments are lower. Furthermore – if certain preconditions are fulfilled – there is an additional supplement limited to two years for those who move from unemployment benefit I to unemployment benefit II. Needy, non-

Table 2

## Unemployment benefit II: Lump sum standard payment (SP)

	Single or single parent	Other household members		
		Children up to 14 years of age each	Children between 15 and 18 years of age each	Adults (19 years of age and above) each
	100% SP	60% SP	80% SP	90% SP
Western Germany including Berlin	345 €	207 €	276 €	311 €
Eastern Germany	331 €	199 €	265 €	298 €
	<u>Additionally per household:</u>			
	<ul style="list-style-type: none"> <li>▪ Transfer for lodging and heating</li> <li>▪ (If the preconditions are fulfilled), a limited additional payment of up to EUR 160 for gainfully employed individuals and for their partners and up to EUR 60 for each child</li> <li>▪ Contributions to compulsory social insurance (health, nursing care and old age)</li> </ul>			

Source: Bundesministerium für Wirtschaft und Arbeit (2004).

employable individuals who live in a household with an employable recipient of unemployment benefit II are entitled to receive a new social benefit (Sozialgeld). In addition to these lump sum transfers the actual costs for lodging and heating are provided, if deemed appropriate, as well as compulsory social insurance contributions and payments for special needs (Table 2).

Unemployment benefit II is very similar to the former social assistance benefit. The standard payment in Western Germany (EUR 345) is higher than the social assistance benefit (EUR 295 since July 2004); nevertheless social assistance benefits included more additional payments than unemployment benefit II. In comparison to former unemployment assistance (on average EUR 550 in 2003 in Western Germany) unemployment benefit II is less generous.<sup>2</sup> This should result in pressure on the jobless to take on work. Furthermore, there will be an increased tendency to take on work because the stricter means test leads to a reduction in the percentage of unemployed who receive benefits.

### Sanctions

Transfer payments will not only be less generous because of their (assumed) reduction but also because of the tightening of the eligibility criteria. Of

particular importance is the new definition of employment that a recipient of unemployment benefit II must accept. According to "Hartz IV" every kind of work is basically acceptable. A job cannot be turned down because it does not correspond to an individual's profession or education or because the conditions are less favourable than in the last job held.<sup>3</sup> Compensation below the collectively bargained wage rate or local wages does not make the job less acceptable. The offer may not, however, be a violation of the law (for example, a universally binding collective agreement) or *contra bonos mores*. According to current judicial decisions such a violation would occur, for example, if payment was 30 percent below local wages.

Those who reject acceptable work (but also training, community service or placement services) shall receive 30 percent less of the standard transfer payment for three months (approximately EUR 100 less). For the same period, the limited supplementary payment will also be withdrawn. If work is rejected a second time the transfer payments are reduced once more by EUR 100. If there are repeated violations of any obligations, unemployment benefit II is eliminated entirely. If individuals under 25 years of age reject work, they receive no transfer payments at all for three months. The costs for lodging and heating during this period are paid directly to the landlord (Bundesagentur für Arbeit 2004).

The question arises whether the sanctions implemented by "Hartz IV" will encourage recipients of

<sup>2</sup> It should be taken into account, however, that the recipients of unemployment benefit II also receive payments for their actual costs for lodging whereas the recipients of unemployment assistance could only qualify for supplementary social welfare assistance and housing assistance if they fulfilled special conditions. As there is no statistical information on this point, the impact of this additional transfer cannot be estimated at the present time. It is thus impossible to state with certainty whether transfer payments have become less generous after the introduction of "Hartz IV" or not.

<sup>3</sup> Taking on work is, however, not acceptable when, for example, children up to the age of three must be taken care of or other family members require nursing care.

unemployment benefit II to take on work. This will of course depend on the actual implementation of the sanctions. The Federal Labour Office in Germany has had experience with the imposition of sanctions. Its agencies suspended benefits temporarily also in the past if benefit recipients rejected acceptable work. Similarly, the municipalities have imposed sanctions on social assistance recipients who in some way did not fulfil their obligations within the scope of the “help to work” programme (municipal employment promotion). Valid data on the implementation of sanctions are not available, however. The Federal Labour Office (Bundesagentur für Arbeit 2003) has figures on the number of sanctions imposed,<sup>4</sup> but not on the number of acceptable jobs that were not accepted. The same is true of the sanctions imposed by the municipalities.<sup>5</sup> According to experts sanctions have been imposed in relatively few cases when recipients had not accepted work (Gerhardt 2004). And only 41 percent of all sanctions that were imposed were actually executed (Wilke 2003). With the introduction of “Hartz IV” it is questionable whether the imposition of sanctions will become stricter. On the one hand, the burden of proof for rejecting acceptable work now lies in the hands of the unemployed. On the other hand, “clever” individuals will always be able to escape sanctions. Moreover, the employees of the placement services and the municipalities are often reluctant to impose sanctions.

The effectiveness of “Hartz IV” sanctions not only depends on how they are implemented but also on how the unemployed react to them. For Germany there are no studies on this issue. The microeconomic studies by Abbring et al. (2000), van den Berg et al. (2003) and Lalive et al. (2002) for the Netherlands and Switzerland indicate that sanctions are an effective instrument to increase the integration of the unemployed in the labour market. The meta-evaluation of Ashworth et al. (2004) shows for the US the resounding success of sanctions as a measure to reduce unemploy-

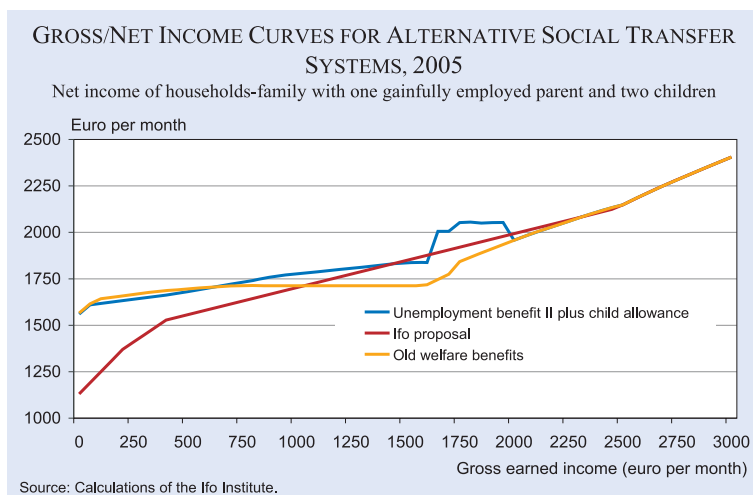
ment. Further studies show that the positive effects are not only a product of the sanctions themselves (ex-post effects) but are brought about in anticipation of possible sanctions (ex-ante effects).

### Increased earnings disregards

The previous system of unemployment insurance and social assistance benefits offered little incentive to work. “Hartz IV” has improved this situation. With unemployment benefit II, the reduction of transfer payments depends on gross earned income. Beyond an allowance of around EUR 50 there is a transfer reduction rate of 85 percent of the net earned income up to a gross income of EUR 400. For gross earned income between EUR 400 and EUR 900 there is a transfer reduction rate of only 70 percent for the corresponding net earned income. For income between EUR 900 and 1500 the transfer reduction rate rises again to 85 percent. For gross earned income over EUR 1500 unemployment benefit II is reduced at a rate of one for one.

The incentive effects are further clarified in Figure 2. The figure shows the new gross-net income curve in comparison to the old social assistance system and in comparison to a welfare-to-work policy suggested by the Ifo Institute (Sinn et al. 2003). All the curves take into account total taxes, social insurance contributions and income from public transfers (social assistance, housing allowance, child benefit). For the tax regulations and the social insurance contributions the status quo at the beginning of 2005 for Western Germany was assumed. The figure is based on the case of a family with two children. The relevant graph indicates that a recipient of unemployment benefit II

Figure 2



<sup>4</sup> Of 4.87 million cases of unemployment benefits and unemployment assistance granted in 2003, some 185,000 periods of exclusion from benefits were imposed because employment offers were rejected or integration measures were not completed (Bundesagentur für Arbeit 2003, 79 and 93).  
<sup>5</sup> In 2002 101 cities reduced welfare assistance in 11,800 cases (with 92,794 individuals in community service programmes) (Fuchs and Troost 2003, 34).

Table 3

**Marginal tax burden of gross income in percent, 2005<sup>a)</sup>**

Gross income in EUR	Unemployment benefit II	Old social assistance	Ifo proposal
<b>Married couple with two children</b>			
50 – 400 <sup>b)</sup>	85	79	3
400 – 900	80	95	71
900 – 1500	88	100	71
<b>Single</b>			
50 – 400 <sup>b)</sup>	85	79	4
400 – 900	80	95	71
900 – 1500	69	... <sup>c)</sup>	68

<sup>a)</sup> Status quo 2005 assumed for tax regulations and social insurance contributions. - <sup>b)</sup> Allowance for unemployment benefit II of EUR 50. - <sup>c)</sup> No claim to social benefits.

Source: Calculations of the Ifo Institute.

with a gross earned income of up to EUR 400 has to return 85 Cent of every Euro earned. Between EUR 400 and EUR 900 he has to go without 80 Cent as a result of transfer reductions if he earns one Euro more.<sup>6</sup> Between EUR 900 and EUR 1500 the transfer reduction is on average 88 percent for every extra Euro of gross income earned.<sup>7</sup> Except for the income range above EUR 900 the transfer reduction rate of singles is the same as that of families (Table 3). In comparison to the old social assistance system for recipients of unemployment benefit II the financial incentive to work has been slightly improved. The transfer reduction rate for the unemployed taking on work is, however, still very high. In contrast, the Ifo proposal (see below) offers increased earnings disregards, especially in the lowest earnings brackets (Sinn 2004, 234–43).

### Community service

Even though achieving gainful employment has priority, short-term jobs are offered to recipients of unemployment benefit II by municipalities and charitable associations. This work should be in the public interest and it should not displace regular employ-

ment. Offering this work to the unemployed who are difficult to place is meant to promote their entry into the regular labour market. Furthermore, it offers an opportunity to check whether those unemployed are actually available for the labour market. According to the Federal Ministry for Economy and Labour, up to 600,000 jobs are to be created for this purpose. In 2004, there were approximately 210,000 municipal jobs (Sachverständigenrat 2005, Ziffer 252).

For community service jobs the recipients of unemployment benefit II receive 1 to 2 Euros per hour in addition to their unemployment benefits as compensation for additional costs. In contrast to income from regular employment this additional payment is not set off against unemployment benefit II. This means that the effective hourly wages can be higher for a municipal job than for regular employment. If compensation of 1 Euro per hour and a working week of 35 hours is assumed, a single employed in the regular labour market would have to earn a gross income of EUR 652 per month (= EUR 4.30 per hour) to have the same net income of someone employed in community service. With compensation of EUR 1.50 he would have to earn EUR 1,173 per month (= EUR 7.73 per hour) to reach the same net income. With compensation of EUR 2.00 per hour, it would be EUR 1,313 (= EUR 8.66 per hour; Figure 3). This comparison shows that the incentive to take on a regular job for recipients of unemployment benefit II who are employed in community service is relatively low (Buscher 2004). The Social Insurance Code, however, clearly prescribes that taking on regular employment has priority over staying in a temporary municipal job. If regular employment deemed acceptable is rejected by the unemployed individual, the sanctions described above apply.

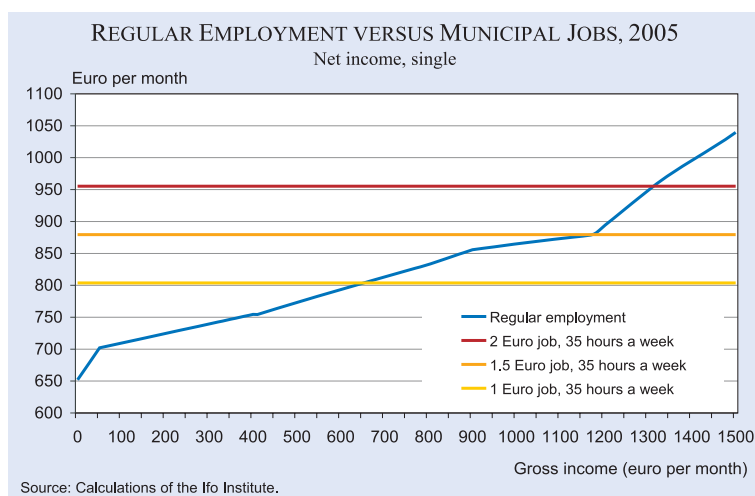
In addition to the danger that community service might become a permanent segment in the labour market, there is also concern that regular employment will be displaced by community service. Despite the rules for community service, municipal work that up until now has been carried out by private companies could now be undertaken by municipal employment agencies at a lower price. The displacement effect would, however, be compensated by the fact that the money saved could be used to award contracts to private companies for other work. Furthermore, private companies could profit in that community service would bar entry into the shadow economy, and in this way the demand for moonlighting would be deflected into the regular market.

<sup>6</sup> The difference between the transfer reduction rate as specified in the "Hartz IV" law (70 percent between EUR 400 and EUR 900) and the reduction rate in Table 3 (80 percent) is due to the fact that in the first case the reduction rate relates to net earned income and in the second case to gross earned income. In the EUR 400 bracket the two transfer reduction rates are the same because net and gross income is the same in this case (regulations for "mini jobs"). See the detailed account in Boss and Elendner (2005).

<sup>7</sup> The odd shape of the curve between EUR 1,600 and EUR 2,050 gross earned income is the result of a special "child supplement" to unemployment benefit II.



Figure 3



### Summary

With “Hartz IV”, Germany started thoroughly reforming an important part of the labour market, thereby contributing to an activation of recipients of welfare benefits. Especially the long-term unemployed and recipients of social assistance have been targeted in an effort to reintegrate them into the labour market. The guiding principle behind this reform is the “right-and-duty” principle. The most important elements of the reform are the reduction of the duration of unemployment benefit I, the combination of unemployment assistance and social assistance to form a new unemployment benefit II, the reduction of transfer payments compared to the old unemployment assistance scheme, stricter sanctions if acceptable work is rejected, the increase of earnings disregards for recipients of unemployment benefit II, and the expansion of jobs in community service. These measures primarily aim at reducing the reservation wage of the unemployed and thus at increasing the demand for labour.

The “Hartz IV” reforms make important steps in the right direction. They will make it easier for unemployed welfare recipients to find regular employment. It is still too early, however, to estimate the extent of the effect on employment (and their fiscal effects). This will be left to the evaluations that will accompany “Hartz IV” (Kaltenborn et al. 2004). However, some deficiencies connected with “Hartz IV” are already under discussion. The earnings disregards for recipients of unemployment benefit II have not been increased sufficiently.<sup>8</sup> Moreover the incentives for

<sup>8</sup> According to an agreement between government and the opposition of April 2005 earnings disregards will be further increased starting from autumn 2005.

the employed in low-wage jobs to work more and/or to attempt to earn higher wages are not adequate. Both issues are connected with the fact that the government was not willing to reduce the minimum level of unemployment benefit II. Furthermore, compensation of 1 to 2 Euros for community work has resulted in a weak incentive to enter regular employment. And finally sanctions lead to bureaucratic decision-making processes and legal checks that could be avoided with sufficient financial incentives.

The Ifo Institute’s suggestion for an “activating social assistance” scheme is mainly based on financial incentives. It calls for a notable reduction of unemployment benefit II for those able but not willing to work and a lower transfer reduction rate in the lowest income bracket (Table 3). At the same time, the employed in low-wage jobs would be offered favourable conditions for earning additional income. For each additionally earned euro of gross income at least 30 Cents could be kept as additional net income. Those who do not immediately find employment in the private sector have the right to a community job with compensation corresponding to the standard rate of unemployment benefit II. The municipalities would have the right to assign these workers to private companies through private temporary work agencies (Sinn et al. 2003, Sinn 2004, chapter 4). The Ifo proposal makes it possible for recipients of welfare benefits to accept lower wages, which would lead in turn to an increased demand for labour on the part of the employers. However, a larger wage dispersion at the bottom end of the wage distribution would require the co-operation of both the employers and the unions.

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## JOB SEARCH MONITORING AND SANCTIONS

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### Introduction

European labor markets display high proportions of long-term unemployed workers (e.g. Machin and Manning 1999). Being unemployed causes skill loss, and being long-term unemployed leads to discouragement and stigmatization. All of this reduces the re-employment probabilities (e.g. Frijters and Van der Klaauw 2006). In principle, a wide range of policy measures is available to prevent unemployed individuals from becoming long-term dependent on benefits, and to stimulate and assist the long-term unemployed workers in their search for jobs. Examples are subsidized employment for youth and long-term unemployed workers, training and schooling programs. Unfortunately, the evidence on the effectiveness of these policies is not encouraging (see e.g. Heckman, LaLonde and Smith 1999 for an overview).

In this paper we consider the evidence for a rather novel set of policy tools, namely monitoring the job search effort of unemployed workers and punishing them financially if they do not meet the effort requirements.<sup>1</sup> In OECD countries, monitoring has become increasingly important (see OECD 2000 for a survey). Monitoring may be purely administrative. For example, the case worker may double-check whether the unemployed individual has made the applications that (s)he states to have made in the submitted monthly overview of job search activities. However, monitoring also often involves regular meetings at the UI agency or the employment office,

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<sup>1</sup> We restrict attention to monitoring after inflow into unemployment and we ignore effects on the size and composition of the inflow (Black et al. 2003).

at which recent search activities are evaluated and a plan for the next period is made. This may even include a directive to accept a particular open vacancy. If the unemployed worker does not comply with the guidelines, or does not show up at meetings, or does not carry out the monthly plan, then he may be punished with a sanction in the form of a benefits reduction. A typical punishment for insufficient job search is a 15 percent reduction of unemployment benefits for a period of two months.

The key problem for the unemployment agency is that monitoring is costly. Usually the agencies only consider samples of cases, so that individual detection rates are smaller than 100 percent. The costs of monitoring *formal* job search, such as responding to personnel advertisements and registering at the public employment office, are relatively low. However, *informal* job search, such as finding job offers through referral by an employed worker, a friend or a relative, is virtually impossible to monitor. We will discuss under which circumstances monitoring is a useful policy. In this we rely heavily on Van den Berg and Van der Klaauw (2006).

### Theory

This section provides an informal description of some economic-theoretical insights regarding the effects of monitoring and sanctions. Consider unemployed workers who endogenously determine their search effort. Job offers can arrive through formal as well as informal search channels, each with its own specific characteristics. We take monitoring to be concerned with compliance to an explicit lower bound for the amount of formal job search effort. If the unemployed worker does not comply with this requirement, he is at the risk of getting a temporary benefit reduction.

Full compliance to the monitoring requirements can be achieved by a sufficiently high probability of detecting a lack of search effort and a sufficiently severe punishment. In practice, sanctions are not uncommon. Apparently, certain unemployed workers are willing to take the risk of being given a sanction. Field research among case workers shows that mon-

itoring is imperfect (i.e., based on samples), so that indeed it may be optimal for some individuals to deliberately run the risk of being caught.

Monitoring only affects job search behavior if the minimum search requirements are above the optimal formal job search effort in the absence of monitoring. We restrict attention to this case. We assume that unemployed workers know the relation between search behavior and the probability that a sanction will be imposed. Some unemployed workers will be more willing to take the risk of being detected than others. However, monitoring causes unemployed workers to devote more effort to formal job search. Unemployed workers are forced to behave sub-optimally from their private point of view, and therefore they lower their reservation wage. With monitoring, being unemployed is less attractive, which causes unemployed workers to be less selective on jobs.

At the same time, monitoring typically reduces amount of informal job search effort. What is more, the net result of the increase in formal effort and the decrease in informal effort may actually be negative. In particular, if informal job search is more effective than formal job search, then monitoring may easily have a perverse effect on re-employment probabilities. In this case monitoring is clearly an ineffective policy.<sup>2</sup>

Monitoring is more likely to increase re-employment rates if the informal search channel is relatively unimportant compared to the formal search channel. “Unimportant” here means that the informal search channel is not very fertile, or that informal search effort is already very small so that there is not much scope for substitution. The empirical literature is informative on the use of different search channels by different types of workers. There is evidence that workers whose chances to find a job are low, such as long-term unemployed workers, workers in sectors with unfavorable circumstances, and workers in recessions, all rely to a relatively large extent on formal search. Such individuals do not have access to informal search channels, or their informal search channel has dried up. For them, monitoring may have a positive effect on re-employment rates. Conversely, for individuals with favorable characteristics or good eco-

nomical circumstances, the re-employment rate is not likely to increase upon stricter monitoring, and it may even decrease. Here one may think of well-qualified unemployed workers with a short elapsed unemployment duration in good economic circumstances.

An unemployed worker who devotes less effort to formal job search than the minimum requirements may at some point get a sanction. We now turn to the effects of imposition of a sanction. Since unemployed workers do not anticipate the actual moment of imposition of a sanction, the sanction causes a downward jump in the reservation wage at the moment of imposition. At the same time, the unemployed worker increases both formal and informal search effort since the lower benefit level makes it less attractive to be unemployed. Therefore, at the moment at which a sanction is imposed, the transition rate from unemployment to work jumps upward. These effects are temporary. The unemployed worker knows the duration of the sanction and anticipates on the moment at which the sanction period expires.

However, sanctions are more than only a temporary benefit reduction. Once a sanction has been imposed, the unemployment agency often provides the unemployed worker with some assistance on how to improve his behavior to avoid future sanctions and on how to search for jobs more effectively. At the same time the behavior of the unemployed worker is more closely monitored, and the magnitude of a subsequent sanction is often much larger. Data show that recidivism is very rare, which suggests that punished unemployed workers comply to the minimum search requirements. The fact that the individual received a sanction at all suggests that this individual did not have much scope for substituting informal search effort into formal search effort. The sanction and the closer monitoring afterwards then cause a permanent increase in re-employment rates, through higher formal search effort and lower reservation wages.

### Empirical results

In this section we discuss some of the empirical evidence. Linking this with the theoretical insights enables us to extrapolate the empirical results and to draw conclusions about a wider set of labor market policies for job search assistance and monitoring of search effort. In contrast to the previous section, we

<sup>2</sup> See Van den Berg and Van der Klaauw (2006) for a detailed analysis. The results bears an analogy to results in principal-agent models with multi-talking, where the principal incompletely observes the performance of the agent (Milgrom and Roberts 1992). This literature also often concludes that contracts based on the performance in a single task can give rise to dysfunctional behavior and may be less efficient than lump-sum contracts.

start off by considering sanctions and then turn to monitoring.

There is only a limited literature on the effects of punitive benefit reductions on re-employment of unemployed workers. For the Netherlands, Abbring, Van den Berg and Van Ours (2005) and Van den Berg, Van der Klaauw and Van Ours (2004) investigate the effect of imposing sanctions on the re-employment rate of respectively UI recipients and welfare recipients. The empirical analyses use the so-called Timing-of-Events approach. This entails the estimation of a model describing the process at which sanctions are imposed and the process at which individuals move to work. To control for selectivity of the imposition of sanctions, the unobserved heterogeneity terms in both hazard rates are allowed to be correlated with each other. The approach does not require instrumental variation but relies instead on random variation in the timing of treatment (Abbring and Van den Berg 2003).

Both empirical studies find that the actual imposition of a sanction has a positive effect on re-employment. Remarkably, in both cases, the exit rate to work doubles after the sanction.<sup>3</sup> Moreover, the effects on the exit rates are long-lasting, in that they do not disappear after the benefits reduction has expired.

For the welfare recipients one may argue that two times a small number is still a small number. To examine this more closely we translate the effect on the exit rates to work into effects on exit probabilities to work. If no sanctions are applied, then the probability that the average welfare recipient finds work within two years after inflow is equal to 0.66. However, if the same individual had a sanction imposed after 6 months of welfare, then the probability of leaving within two years increases to 0.91. Now consider a 50-year old individual who is otherwise equal. If no sanctions are applied, then his probability of leaving welfare within two years after inflow is equal to 0.29. If he had been given a sanction after 6 months, then this probability increases to 0.54.

Clearly, these effects are substantial and they indicate that the unemployed individuals are responsive to monetary incentives. To put this differently, the re-employment rate can be substantially increased among individuals who are at risk of a sanction, if one tightens the search effort conditions for benefits en-

titlement. Presumably, the threat of severe additional sanctions plays a major role in the magnitude of the effect. Note that the studies do not examine the effect on the characteristics of the job that is accepted. It cannot be ruled out that sanction recipients are so desperate that they accept any job they can get, whereas it could be socially optimal to search longer for a job with a high match-specific productivity. Unfortunately, it is difficult to obtain register data that contain longitudinal individual information on unemployment durations, sanctions, and characteristics of the post-unemployment job, like the hourly wage and the job contract.

Another noteworthy result from the above studies is that the individuals with very unfavorable personal characteristics are not as often sanctioned as one might expect. This might be because they fear the economic consequences of a sanction so much that they behave in an exemplary way. Alternatively, the case worker may feel sorry for them and may use his discretionary power to withhold sanctions for them. Field research supports the latter explanation.

Note that the estimated effect is only the effect of actually imposing the sanction. Given that the data are from a world with sanctions we cannot use these studies to identify the effect of having a benefits system with sanctions as opposed to a benefits system without sanctions. For this we need to compare different monitoring regimes.

There is a relatively large empirical literature on job search monitoring. We summarize the results that are based on social experiments. Van den Berg and Van der Klaauw (2006) examine a monitoring scheme for short-term unemployed workers with good labor market prospects in the Netherlands. They show that monitoring leads to substitution from informal search methods to formal methods. Clearly, this subpopulation of individuals has much scope for job search channel substitution. Within it, sanctions are almost never observed. Also, the monitoring of them has no significant effect on re-employment rates.

Other studies show that the effect of monitoring on the transition rate to work is stronger if the labor market prospects are worse. Also, the more intensive the monitoring, the larger the effect on the transition rate to work (Johnson and Klepinger 1994; Gorter and Kalb 1996; Dolton and O'Neill 1996; Klepinger, Johnson and Joesch 2002; Ashenfelter, Ashmore and Deschênes 2005).

<sup>3</sup> Lalive, Van Ours and Zweimüller (2002) find similar results for UI recipients in Switzerland.

## Discussion

The results from the microeconomic studies on the effects of monitoring and sanctions are in agreement with the theoretical predictions. We can draw a number of conclusions from them. First, stricter monitoring of job search behavior is not always a useful policy to stimulate re-employment. For individuals with very favorable characteristics or in very good economic circumstances, the re-employment rate is not likely to increase upon stricter monitoring, and it may even decrease. Conversely, for individuals whose chances to find a job are lower, such as low-skilled workers, long-term unemployed workers, workers in sectors with unfavorable circumstances, and workers in recessions, monitoring (in combination with the threat of punishment for non-compliance) has a positive effect on re-employment rates. Of course, for monitoring to increase re-employment rates, the search effort requirements should be demanding.

Actual imposition of a sanction has a positive effect on re-employment. Basically, the exit rate to work doubles after the sanction. Moreover, the effect is long-lasting, in that it does not disappear after the benefits reduction has expired. These results indicate that the unemployed individuals are responsive to monetary incentives.

Evidently, monitoring is often a useful policy tool. One may enhance the effectiveness by linking it to a profiling system for unemployed workers. After all, the effect of monitoring depends on characteristics of the individual and his environment. Unemployed individuals will not participate voluntarily in a monitoring scheme, since it reduces their reservation wages, so one needs to assign individuals to the scheme (or not). It is risky to let case workers do this assignment. They tend to use their discretionary power to reduce the intensity of monitoring (and to withhold sanctions) for unemployed individuals who in their view have very bad labor market prospects. This is ironic in the light of the fact that intensive monitoring works best for those individuals.

If a supporting profiling system is unavailable, or if the unemployed have good labor market prospects, then a general decrease of the unemployment benefits level without search requirements is to be preferred even if the unemployment agency has information on formal job search. A reduction in benefits that gives the same reservation wage as monitoring

is then more effective in stimulating re-employment: it is a less expensive policy, while the unemployed workers are indifferent.

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## THE GERMAN ELECTRICITY SECTOR – FINALLY ON THE MOVE?

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Not only once but several times the media have maintained that the liberalisation of electricity could have a dangerous impact on the security of supply, grid investments, and the system, as well as on the price stability of this crucial and sensitive sector. In the summer of 2003, when the liberalisation and regulation of electricity had just entered a new round in the EU, several European countries suffered from power blackouts. Two years before it was California, which involuntarily gained negative publicity for its recently liberalised power sector.

Contrary to these cases blackouts have rarely been a serious issue in Germany so far. But in this country, which is supposed to form the centre of a common European electricity market, where the network usage costs are currently 70 percent above the EU average and electricity retail prices among the highest in the EU, a new energy law is on the verge of being enacted. The question that arises here is whether this law (which is overdue according to EU legislation) has the ability to perform the balancing act between the retention of a stable and sustainable system and the containment of excessive market power on the part of the incumbent players. At the moment it seems that the latter aspect is more urging – but nevertheless both problems should be solved simultaneously.

In this article we analyse the recent developments in the German electricity sector and relate them to experiences gained in the US. Initially we give a short overview to the special characteristics of this exceptional sector.

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### Particularities of the electricity sector

The electricity sector exhibits several distinctive properties as compared to most other markets. Some of these properties are presented here in brief.

#### *Natural monopoly*

Traditionally the whole electricity sector was regarded as unsuitable for competition. In particular, high sunk capital costs predominated in all areas of the sector, creating economies of scale over the entire range of output. In this case the long-term cost minimising capacity and size of the firm is relatively large in comparison to market demand. There are also strong economies of scope between generation, transmission and distribution. With such economies of scale and scope it is optimal for one operator to serve the entire market. In this context publicly owned entities seemed to be a sensible way of securing the benefits of size – and the required large-scale financing – without suffering the drawbacks of monopoly pricing. At the same time, the vertical integration of generation and transmission, and often of generation, transmission and distribution would capture economies of scope. In countries (such as Germany) with traditionally multiple local private energy providers it was common for the government to license regionally protected monopolies, which in Germany were regulated only slightly.

Over the past two to three decades new technologies have significantly reduced the minimum efficient scale of generating plants, the investment costs of new units, and the time needed to plan and build new plants, while economies of scale for transmission and distribution networks persisted. Thus, competition between generators seemed feasible and efficiency improving, provided economies of scope between generation and transmission networks were not too great. The extent of those economies was not well known at the time electricity restructuring occurred in several countries, and we are still unsure about them.

One reason for the large economies of scale in transmission and distribution is due to the properties of electricity itself. In periods of low demand electric power can hardly be stored for peak load periods.<sup>1</sup> In an integrated network different regions are interconnected and the respective peak load periods, which rarely overlap completely, can be balanced

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<sup>1</sup> In principle it is possible via pump storage power stations – but only at very high costs or energy losses.

against each other. In other words, without a supra-regional integrated network every region would need higher capacities in order to respond to the respective demand in peak periods. For the same reason reserve capacities (and some ancillary services, such as voltage control) can be of reduced size in a larger network.

#### *Vertical separation*

The feasibility and desirability of competition in generation, along with the continued persistence of natural monopoly in transmission and distribution networks calls for the establishment of independent generation companies and possibly independent marketers. These competing companies would either have access rights to transmission and distribution grids of vertically integrated electric utilities, or the grids themselves would be vertically separated. In any case, access of generators and other electricity suppliers to transmission and distribution grids is an essential facility without which competition among generators (and marketers) would not be feasible.

Transmission grids connect generating plants with consumption centres, using high-voltage networks that are typically meshed in countries with a large number of power stations and consumption centres. These grids are characterised by loop flows (Kirchhoff's Law), which means that their total capacity depends in a complicated way on the capacity of the individual links. Also, the networks have to be in equilibrium at any moment in time. Transmission grids therefore exhibit both economies and diseconomies of scope, and those can change by the hour. Their scheduling is simple only if no links are congested. In this case, the efficient electricity prices at all network nodes (both generation nodes and consumption nodes) have to be the same. In contrast, in a congested network the price differences between nodes should reflect the costs of congestion. They represent the scarcity value of transmission along all possible paths between nodes. These nodal price differences would, at the same time, be efficient real-time prices of network usage (Hogan 1992).

Distribution grids convert high-voltage power received from transmission grids into low-voltage power and deliver the electricity to end-users. Loop-flow problems in such grids are usually less pronounced than in transmission grids. In contrast to transmission grids, which are best managed on a regional basis covering

the entirety of a country like Germany, distribution grids are typically many with each one forming a natural monopoly. Once vertical separation is chosen, it therefore makes sense to separate transmission and distribution companies vertically by management and ownership. Benchmark or yardstick regulation, which bases regulatory performance criteria and pricing on the performance of other regulated firms, would be ideal for the many distribution companies but hardly feasible for the single transmission companies.

#### *Market clearance and market power in generation*

As described above electricity supply and demand have to be in equilibrium at any time. Unfortunately power demand fluctuates quite substantially depending on time of day and season. Demand fluctuations cannot effectively be smoothed at this time, because intelligent metering and consumption scheduling devices – although technically feasible – are still lacking in Germany and elsewhere. In order to adjust the supply adequately to these demand fluctuations the power providers (or the generating companies) need to have several different types of power plants. Base load plants (hydro power, nuclear and lignite), which combine high fix and low variable costs, have to be mixed with shoulder plants (coal, natural gas and combined heat and power generation) and peaking plants (oil, gas, and pump storage power stations). The latter are only used for periods of high demand, as they combine low fixed and high variable costs.

But these complex capacity requirements are not easy to adjust to a higher (medium- or long-term) demand. The production of power plants is not only capital intensive but also characterised by substantial indivisibilities. Technological progress has indeed diminished the optimal firm size, but building a new power plant with an average economic life-time of 30 years is still associated with substantial cost and scheduling effort. Therefore those markets are not contestable – using the terms of Baumol, Panzar and Willig (1982) – and this favours inherently the high price-cost margins of the incumbent players. This phenomenon is amplified by the low price elasticity of demand for electricity. In fact, due to the lack of sophisticated metering, short-term demand is almost perfectly inelastic. Recurrent interaction of the market players also allows them to develop subtle strategies of communication and collusion and the short-term capacity constraints (as described above) prevent deviations from a strategy of collusion from being profitable.



*Energy as an essential input for every economy*

It is not only due to technical and market features that electricity takes on a special position among all bulk products. For every industry (and every household) it is also one of the most important input factors which are necessary for the functioning of almost every other activity. This is expressed by the low demand elasticity with respect to price and the almost unitary elasticity with respect to income. As we have seen in California, an electricity crisis certainly has the ability to disturb the economic processes substantially.

Under a private-sector environment the long term goal “security of supply” would be dominated by short-term profit orientation – and an inflexible price system cannot align these goals. It is therefore obvious that a stable and incentive-based regulatory framework is very important to avoid investment backlogs in generation, transmission and distribution of electricity. Whether such a framework is in place or will emerge in Europe’s largest economy, namely Germany, will be discussed after including some lessons from the US.

**Lessons from US electricity sector reforms**

For a better understanding of the German legislative process it seems helpful to recall the problems that have hurt the US in their process of electricity restructuring. We will first give a brief description of the crisis in California in 2000/2001, which was the largest one of that kind in the US history, and then discuss some further features of the US electricity sector.

*The California crisis*

In the early 1990s it was in California where US electricity prices were highest. This situation was the result of failures in the existing system of vertically integrated monopolies. High investment costs for nuclear power plants, overcapacities and many expensive long-term contracts are some aspects that describe the situation at that time. In addition the interaction of the federal (FERC) and regional (CPUC) regulatory authority was inefficient and costly. It was somewhat obvious that the existing framework was inappropriate to solve the current problems and therefore California tried a new way and became precursor in the US electricity liberalisation. In 1998 the bill that combined complicated ingredients which have never

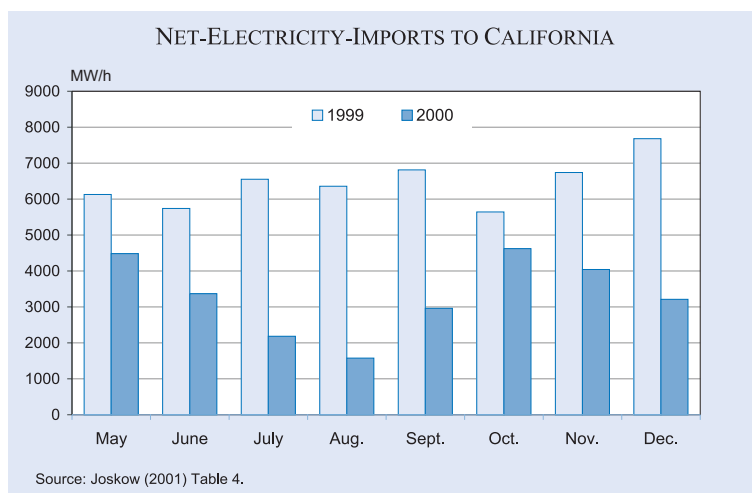
been mixed together before (Vogelsang 2004, 15–16), became effective.

At the beginning of the reforms slightly more than 80 percent of the generation capacity in California was owned by three private electricity companies. In order to create a competitive wholesale market the distribution companies were forced to divest themselves of at least half of their generation facilities (Joskow 2001, 376). An independent system operator (ISO, in California: CAISO) was established to serve as a platform for wholesale and retail market trading and to supervise the transmission grid (which includes running various energy balancing, ancillary service, and congestion management markets). In addition the California Power Exchange (CALPX) was created to run day-ahead and hour-ahead hourly public wholesale markets for sales of energy. Both are non-profit corporations.

Despite the new possibilities of changing their energy provider, few customers took that option. At the same time retail prices of the incumbents were lowered by 10 percent and then fixed by law (until stranded assets were fully paid off or, at the latest, until 2002). All this happened under the assumption that wholesale power prices would always stay significantly below the regulated retail price. The three big providers were still serving about 88 percent of total demand, but they had divested the majority of their generating capacities before. They were thus obliged to buy a large fraction of the electricity, which was needed to serve all the customers, at CALPX and CAISO. This situation in comparison with fixed retail prices made them vulnerable for any price shock at the wholesale market. And this was exactly what was going to happen.

The slow process of licensing and completion of new power plants drove reserve capacities down by 1999. Then came the extremely hot summer of 2000. As a consequence, the electricity imports from the northern neighbouring states decreased dramatically (to a large extent the imports consisted of weather depending hydro power – see the Figure). At the same time, electricity demand rose due to the increased use of air condition as well as a booming economy.

As a consequence of rising demand and decreasing supply the electricity wholesale prices increased dramatically (from April to December 2000 about 1,300 percent) – and at the same time the providers had to serve the customers at lower and legally fixed retail



prices<sup>2</sup>. In addition the early onset of winter pushed the price for gas substantially and induced a further increase in electricity prices. A simultaneous increase in the price for emission certificates accelerated the whole process.

All these (mainly exogenous) adverse factors, emerging in combination, were certainly very problematic – nevertheless a well-developed regulatory framework probably would have been able to deal with these problems. In California this was not the case. The regulatory institutions were not able to mitigate the sector-intrinsic problems of market power (as described above) and this finally turned the balance. According to Borenstein et al. (2002) 59 percent of the electricity price increase between summer 1999 and summer 2000 was due to problems with market power. Wolak (2003) has calculated that market power (measured via the Lerner Index) of the five largest generators had quintupled between 1999 and 2000. Congestions in the grid had aggravated the “normal” market power problems.

As a result of all these factors the reserve capacities declined in summer 2000 below 5 percent, at the end of the year they were below 1.5 percent. This caused several emergencies of highest priority, but energy savings could still avert blackouts. Shortly thereafter the two largest providers went bankrupt and could not buy the necessary electricity to serve their customers. This finally triggered several huge blackouts in January 2001. Shortly thereafter CALPX went bankrupt as well and California was in the middle of its deepest electricity crisis, which has no analogy elsewhere – so far.

<sup>2</sup> For an illustration of the changing demand and the price developments, see Kuhlmann (2004), 59–60.

### *General features and institutions of the US electricity market*

Although the California disaster was due to a combination of adverse weather, fuel markets and a booming economy, it is clear that it would not have happened without electricity restructuring. It is therefore worth looking at other US jurisdictions for better solutions. This particularly concerns the US federal level represented by the Federal Energy Regulatory Commission (FERC). The FERC was unable or unwilling to interfere in California

to prevent the crisis. However, the FERC responded by constraining wholesale electricity prices through price caps and by trying to establish regional transmission organisations (RTOs) and a standard market design for highly centralised electricity markets<sup>3</sup>. The RTOs (which have not yet been established throughout the country) typically cover areas beyond single states and fulfil the same functions as ISOs including the function that used to be fulfilled by CALPX. RTOs and a skilful market design are particularly important in order to help avoid crises such as California as well as blackouts like in the north-eastern US in 2003. They require the adherence to consistent rules and an expansion of the transmission system. The latter has been particularly difficult in the US. Environmental concerns have been one reason. The other, however, is that additional transmission capacity can hurt areas with excess electricity supplies, which they would like to keep to themselves and thereby lower electricity prices in those areas. This has particularly hurt California, because it could not access eastern states for cheaper electricity.

### **The German electricity sector**

Germany possesses a closely meshed electricity grid, where congestion or breakdowns are a rare exception and events like the ones in California (in 2001) or the north-eastern US and some European countries (in 2003) seem quite unlikely at the moment. The German market for electricity was opened for competition in 1998 – in theory even to 100 percent, which means that all (industry and private) customers can choose their individual provider. At that time

<sup>3</sup> The FERC only has jurisdiction over transmission networks and wholesale transactions so that distribution companies are regulated by state public utility commissions only.

this went far beyond the EU guidelines and Germany seemed to be a precursor as regards electricity liberalisation.

Actually the market is still dominated by the originally dominant providers, who have merged from six to four since the liberalisation<sup>4</sup>. They have an aggregate market share of about 80 percent in electricity generation (without accounting for any cross-shareholding) – another 10 percent is produced by roughly 900 regional and municipal providers and the remaining 10 percent is produced by Deutsche Bahn AG and the manufacturing industry for their own electricity requirements. The same four dominant companies own the transmission grid. The regional providers and municipal utilities are very numerous, and one might think this should be enough to initiate competition<sup>5</sup>, but in many cases the big four hold major shareholdings in these utilities. Between 2000 and 2002 RWE Energie and E.on acquired new stakes in about 40 utilities without causing an intervention of the Federal Cartel Office (Leprich 2002, 4).

#### *The Energy Law of 1998*

Whether competition in the electricity sector of an economy can emerge or not critically depends on the design of the market rules. This is particularly the case for the rules concerning network access. As described above in the section on natural monopoly,<sup>6</sup> the grid continues to represent an essential facility or monopolistic bottleneck. The access to this facility is crucial for potential and actual competitors and thus also for efficient competition.

The European electricity directive that was in force at that time (96/92/EG) gave member states the choice between negotiated<sup>7</sup> or regulated<sup>8</sup> third party access (TPA) and the single buyer<sup>9</sup> procedure. Germany was

<sup>4</sup> VEBA and VIAG merged with E.on in 2000, and VEW was acquired by RWE. Apart from that there are Energie Baden-Württemberg (EnBW, which is mainly owned by Electricité de France) and Vattenfall – a Swedish state owned enterprise, which is also active in Finland and Poland.

<sup>5</sup> The regional providers mainly fulfil distributing and marketing services, but several of them also produce energy. Indeed some of these small municipal utilities meanwhile try to merge with others and start to counterbalance the big four. See for example *Süddeutsche Zeitung* (2005).

<sup>6</sup> See the paragraph on the Natural Monopoly properties in electricity.

<sup>7</sup> Under negotiated TPA producers and consumers of electricity will contract supplies directly with each other, but they will have to negotiate access to the network with its operator.

<sup>8</sup> In case of regulated TPA the price for the use of the transmission and distribution systems can, however, not be negotiated. It is regulated by a national regulatory agency (NRA).

<sup>9</sup> The single buyer has been defined in the directive as a legal person responsible for the unified management of the transmission system and/or for centralised electricity purchasing and selling. This means that the single buyer would normally, but not necessarily, also be the transmission system operator.

the only country choosing the negotiated TPA – which was actually implemented in several trade association agreements between energy producers and industrial consumers – where it was quite easy for the “old bulls” to make life hard for their competitors. Many of these competitors have vanished since then. These agreements were quite favourable to the incumbent network operators. This comes as no surprise, as not a single stakeholder of the potential competitors was involved in the proceedings. In the first *agreement* (concluded in May 1998) transmission was defined as point-to-point delivery and every electricity trader had to place a contract on the precise wheeling of power, which was obviously quite obstructive for effective competition. Therefore in December 1999 the associations approved a *second agreement*. This time the involved parties (in the meantime there were 6 instead of 3) assured simplified network access and created the preconditions for trades in a power exchange. This was aided by the so-called connection-point-model (*Anschlußpunktmodell*). In this scheme the end-customer paid an access fee to the distribution-network provider to whom he was immediately connected. He thereby obtained access to the entire German electricity network (at all voltage levels) and could then freely choose his provider. In other words, he had to sign two new contracts and bear some additional switching charges if he wanted to change his provider. Moreover there was no regulator in charge of monitoring whether the switching process was delayed deliberately by the respective incumbent. All these direct costs and indirect obstacles certainly played a decisive role in the decision of customers to change their provider. Less than four percent of the German households changed their energy provider after the liberalisation – an absurdly small number compared to 40 percent in the UK.

Finally in a *third attempt* (or rather an addendum to the second) in December 2001 the double-contract-model was abolished, but the pricing principles became more complicated than before. *Another supplement* was added in April 2002, where a cost-based real pre-tax return on equity was fixed at 6.5 percent, which has been widely criticised for its inflating effect on the net user fees.

The price development can serve as an indicator for the effectiveness of all these agreements. The electricity tariff fell initially (between 1998 and 2000) a little for households (1.8 percent per year) and quite considerably for the industry (13.7 percent per year), but in the following three years this process was in-

verted and the prices rose again (10.6 percent for the industry and 4.6 percent for households per year; BMWA 2005c). The Ecotax (introduced in 1999 and further increased in four steps) inflated this price increase, but this did not change the story.<sup>10</sup> In June 2003 the European Commission finally abolished the possibility of negotiated TPA and decided that in all member states a national regulator had to be established until July 2004 (Directive 2003/54/EC). From that moment the German “special way” was officially designated a dead-end street.

### *The new Energy Law of 2005*

Soon it became obvious that the deadline for the enactment of a new law would elapse without any new legislation being enacted. Finally, in July 2004, the federal cabinet agreed upon a first draft of the new energy bill. But it took another nine months of negotiating before a concrete law with all its prescriptions entered the final legislative process. On 15 April 2005 the Bundestag (German Parliament) finally passed a new energy law (which still has to pass the Federal Council, the German upper house, consisting of the Länder representatives<sup>11</sup>). Among the important alterations or improvements of the new law are the following.

First of all there is the legal and operational unbundling of generation and the networks. This measure should ensure that there are no incentives for the grid operator to discriminate against other network users in favour of its own subsidiaries. All vertically integrated electric power companies with more than 100,000 customers have to unbundle their network activities from generation and marketing – legally and operationally, but not in terms of ownership. For transmission companies (the big four) this rule will become effective immediately – the deadline for distribution companies is July 2007.

The German regulatory authority for telecommunication and postal services (RegTP) will inherit the supervision of the electricity and gas sector (as well as for the railway sector) and will be renamed “Federal Network Agency” (“*Bundesnetzagentur*”). A major task of this agency will be to set (or to specify the

details of) the terms and conditions for network access, including price regulation, and to monitor compliance with these rules. It will further have some monitoring duties, a voice in the unification of contractual obligations and the task of settling disputes. Its discretionary power or ex-ante competencies, however, are quite limited. Some examples of the discretion it lacks are given below.

At any time the incumbent can – without previous notice – terminate the contract with the competitor who needs access to the grid. As explanatory statement such a measure should be “upon good cause”, but this is a discretionary decision by the respective network operator, with no exertion of influence by the regulator. This gives the incumbent again a strong position.

Concerning the transaction costs associated with the network access it is intended that the incumbent network operators create standardised rules, but here again the regulator has no say in this matter. Its influence is also limited in the access to distribution networks, where the regulator can only affect the settlement procedure and the corresponding specification of a uniform price that has to be paid for deviations from predetermined load profiles.

Nevertheless, following several complaints of the energy-consuming industry and the Länder (Federal States) on the draft bill, the federal government, in the bill passed by the Bundestag, has somewhat enlarged the discretion of the regulator, in particular, with respect to the introduction of incentive regulation. After all the fierce criticism voiced in the course of the legislative process, the federal government has authorised the regulatory agency to further develop and to implement the concept for a price-cap or revenue-cap approach. Furthermore the regulator has a say in determining the conditions and notice periods, which are relevant for a change of the energy provider.

For the starting phase of the legislation, a rate-of-return provision will prevail with an allowed return on equity of 6.5 percent real pre tax. This will be replaced after one year by a new calculation provided by the regulator or by incentive regulation. The incentive regulation can come either in the form of price caps or revenue caps. The cap period has to be between two and five years. The scope of each cap is left open and can be restricted to certain voltage levels and networks. Adjustment factors include automatic pass-through of exogenous cost changes (e.g.,

<sup>10</sup> Even after tax deduction the average yearly price increase for households between 2000 and 2002 was three times higher than in the eight years preceding the liberalisation. In the industry, where price increases were even larger, 80 percent of the tax was initially remitted – for energy-intensive enterprises this is still the case.

<sup>11</sup> The current state of affairs is that the Länder representatives rejected the law (on April 29<sup>th</sup>) and remitted it to the mediation committee, which is supposed to agree on a compromise till June 15<sup>th</sup>. The law can then become effective on July 1<sup>st</sup>.

due to tax changes), inflation adjustments and incentive factors (known as “X”-factor in the literature on price caps). If price caps are chosen they should include some adjustment for quantity changes. The incentive factors for each cap period should be based on benchmarking relative to cost calculations for peer networks. The incentives can be set for each network individually or for groups of networks. Most of the details for the methods to be used in implementing the incentive provisions will be developed in by-laws enacted by the government, while the execution and decisions about individual networks or groups of networks will be made by the Federal Network Agency. At this point the new price regulation only refers to changes proposed by the grids for existing prices, but the political debate may form an ultimate compromise that would establish starting prices for all network access based on the new law.

Proposed bylaws to the Energy Law cover the pricing approach in detail. Network services are to be priced on the basis of maximum demand of a user during the relevant pricing period combined with a kWh price, which itself depends on annual load duration. This leads to a refined maximum demand tariff, where the total payment of a user is the sum of the maximum demand payment and the kWh used times the kWh fee, which itself depends on the relationship between peak and average use. As an alternative for users without maximum demand metering possibilities, grid access prices may be based on kWh usage alone.

Quite similar to the former framework are the rules concerning benchmarking, system responsibility and network access in terms of a single-point market. This means that network companies will continue to be responsible for the system integrity and are therefore entitled to take measures in their own discretion against any malfunctioning of the grid. This function is aided by the duty of generators to form balancing units (“*Bilanzkreise*”), which guarantee balancing of generation and load for each generator or groups of generators at any point in time (on a fifteen-minute basis).<sup>12</sup> This simultaneously means that generators self-schedule, while the grid is responsible for backup capacity, spinning reserves and generation to cover line losses. The purchase of such capacity has to occur in scheduled auctions.

The new law obliges transmission and distribution network owners to regularly report to the regulator

about network capacity utilisation, physical condition and capacity expansion plans. They also have to report expected demands for network capacity in the future and plans for dealing with those demands and the expected capacity utilisation resulting from expansion plans.

#### *Critique of the German approach*

The proposed new German energy law is moving the electricity sector from the trade association agreements of network access to the regulation of electricity networks. In doing so, Germany complies with EU Directives without making a full break with the past. So far Germany has no experience with federal electricity regulation and it is thus appropriate to criticise it so that areas of possible improvements can be identified early on.

A feature distinguishing this law substantially from the American tradition is the limited amount of discretion given the regulator under the law. While American regulators are provided with fairly broad rules of law but constrained by tight rules of procedure (plus control by the courts), the new German energy law goes into the nitty-gritty of regulatory decision making by prescribing methods and outcomes in great detail. This is why an overhaul in the near future may become necessary. The overhaul would have to achieve what otherwise would have been done by an expert regulator. Because such an overhaul depends on the same legal process that has been so incumbency-friendly in the past, it could be a bad omen for future developments and may hinder the development of truly new competition which would depend on infrastructure investments that require stability in the regulatory environment and confidence in the pro-competitive nature of regulation. The lack of regulatory discretion has been justified with constitutional constraints on the actions of civil servants and administrations but the current bill and proposed bylaws clearly constrain the regulator more than the German Telecommunication Act of 2004 does with respect to telecommunications regulation.

Beyond the establishment of regulation by agency the most important break with the past is that the new energy law proposes separating the network parts of vertically integrated electric utilities from the generation and marketing parts. This separation is going to occur with respect to their legal status, their operation and informational links. It is, however, not a separation of ownership. It will take several

<sup>12</sup> They fulfil similar functions to the Balancing and Settlement Code in the UK. See ELEXON (2004).

years to gain sufficient experience to find out if the separation will lead to true independence such that the new network entities act neutrally towards outside generators and marketers. In particular, network expansion decisions may well continue to be influenced by the owners as generators who could favour their own generating plants. However, separation as planned may create enough distance from the former company so that the common interest subsides. For this to happen and in the interest of efficiency and innovation it would be important for the new network companies to develop into a viable and interesting business. For this to happen, the generation section would have to be unbundled from transmission and distribution in terms of ownership – which may raise further problems. In this kind of arrangement it is not so problematic that economies of scope are lost (this would already happen in operational unbundling), but legal questions of interference with private property rights may arise.

The sections of the proposed law and its bylaws on price regulation are highly detailed and certainly will keep economists and lawyers (and the Federal Network Agency) busy for a long time. They include very specific rules for rate-of-return regulation (including the allowed return on equity of 6.5 percent real pre tax), and two long sections each on incentive regulation and cost comparisons between companies. Thus, there is substantial room devoted to benchmarking as a means for incentive regulation, but it is not made clear how those rules will give the firms possibilities for developing innovative business strategies. In particular, by not distinguishing the rules for distribution companies from those for transmission companies the impression is given that both will be treated equally. However, there are about 900 distribution companies, which is an ample set for benchmarking, but only four transmission companies (which, in addition, should actually be run as a single entity). The last-minute inclusion of international benchmarking was therefore direly needed. A similar provision has proved to be very effective for the regulation of access and interconnection in telecommunications. Even if one does not like rate-of-return (or cost-plus) regulation because of its lack of efficiency properties, it may be appropriate to provide a starting point for tariffs that assures viability of the regulated firm and could lead to incentive regulation. Also, rate-of-return criteria could be called for, when incentive regulation needs to be adjusted after a number of years. The price caps or revenue caps allowed by the law as incentive devices are framed with sufficient flexibility so that they could be-

come effective and efficient devices in the hands of a skilled regulator. This flexibility, however, could also lead to weak or distorted incentives, depending on the strength of the bylaws to be enacted by the government and on the expected interference of administrative courts with the regulator.

The bill leaves open if price caps or revenue caps should be used for incentive regulation. Revenue caps have been used elsewhere as a means to constrain total network output. The idea behind this is that electricity generation and electricity networks are environmentally detrimental so that output should be constrained. At the same time, electricity users should not have to pay too much for electricity services. This may be a laudable combination of values. However, it is well known that two rather divergent objectives cannot usually be achieved with a single instrument. Revenue caps, in particular, can lead to an inefficient reduction of output. Price caps are generally more efficient for electricity users, while environmental goals have to be achieved with other instruments than network pricing.

It is unclear at this time whether cross subsidization of generation companies by grid companies under common ownership remains a possible option under the new law. The regulated prices themselves are unlikely to allow for cross subsidies. However, siting and scheduling decisions may favour affiliated generation companies. Only full ownership separation can avoid such conflicts of interest.

The law will give the network companies system responsibility, meaning that they will actually have substantial regulatory functions for the electricity market. Whether this is preferable to the Independent System Operators (ISOs) in the US, remains to be determined empirically. US ISOs are nonprofit institutions run by experts and now supervised by independent bodies. From an economic efficiency perspective they may be influenced by professional engineering standards rather than by economic incentives. In contrast, the German network companies may be subject to overcapitalisation biases from the rate-of-return regulation aspects of the proposed law, although this danger should subside if the regulator moves quickly to incentive regulation.

The use of balancing units as a tool for achieving system-wide balance of generation and consumption at any time is an interesting compromise between individual self-scheduling of generating units and aggre-

gate scheduling by the network operator based on short-term bidding of all generation. Instead, the German system requires bidding only for backup generation, spinning reserves, line losses and ancillary services. Experiences with balancing units have been favourable in the past.

A very important and questionable feature of the German law is its insistence on viewing networks geographically as single-point markets. This is quite appropriate for distribution networks that are typically restricted in geographic size and for which customers requiring special access lines or additional capacities could be accommodated on an individual basis. High-voltage transmission networks, however, not only extend geographically, but also have a certain geographical structure. While there exists some consensus that, except for star-shaped transmission networks, distance is not an appropriate measure of transmission costs, the analysis of network costs suggests that network congestion is typically not evenly distributed geographically and neither are transmission losses. This means that it is either best to view transmission as occurring point-to-point or as using congestible transmission links based on Kirchhoff's law. In contrast, the single-point view of a transmission network would only be appropriate for short-term dispatch if there is no congestion at all in the network or if the nodal price differences are the same between all the relevant generation nodes and consumption nodes. Even if one of these two conditions is satisfied for some time the single-point view of the network gives no guidance for the efficient geographic distribution of transmission capacity expansion investments. While excess transmission network capacity may prevail in Germany at this time, such excess may vanish in the future, due to increased competition in generation or to environmental problems in siting new transmission lines. Whether excess capacity is efficient or not depends on the effect of transmission capacity on competition. In principle, excess capacity in transmission increases the market size for competing generators. However, the costs of excess capacity can be high, while the benefits of increased competition in generation are in the nature of Harberger triangles, which tend to be small.

Investment and usage decisions could also be adversely affected by the pricing approach for network services taken in the proposed legal prescriptions, based on maximum demand tariffs. Maximum demand tariffs have well-known efficiency problems if users are heterogeneous in the time profile of their demands.

They are efficient only if peaks are coincident for all users. This is, however, quite unlikely. As a result, there will always be users whose peak demand falls outside the network peak. They would be induced by maximum demand tariffs to reduce consumption at off-peak periods and would face a zero price at the network peak. Refinements in the German maximum demand tariff may help avoid some of the peaking problems because the likelihood of coincident peaks increases in the ratio between average and peak load and because usage prices are not zero. However, the incentives to spread the load more evenly and move it away from the peak are definitely muted under the German system. Also, nonzero usage prices are inefficient at times of excess capacity.

Combining the potential inefficiencies from the single-point view of the network and the maximum demand tariffs can lead to inefficient investment decisions of generators in terms of location and peaking economies. This is something that the regulator may discover from the reports on capacity utilisation and expansion plans that the network owners have to deliver. If the utilisation figures are based on distorted prices this would bias expansion plans based on them. However, although the resulting capacities could be inefficient, this would not necessarily lead to major congestion problems.

Having criticised the German approach to pricing of transmission network services, it is worth conceding that the simplicity of having a single price schedule and a single service could save transactions costs and avoid price fluctuation and geographical price dispersion. This advantage, however, is paid for by potentially serious inefficiencies that are expressed in high costs of backup power and ancillary services needed to balance and stabilise the networks and in inefficient investment and usage decisions.

Eventually the enlarged influence of the regulator with regard to changing providers is definitely an important improvement. All the past delays and uncertainties were certainly an important reason for many customers to refrain from changing their providers and therefore an impediment for effective competition.

## Conclusions

While we have provided a highly critical view of the German electricity sector reforms, they clearly mark a distinct progress over the status quo. Furthermore,

Germany is unlikely to fall into the same traps as California. Neither is there constraining end-user price regulation nor are network bottlenecks likely any time soon. However, in spite of the progress Germany and California share market power problems in generation. In California (and the US in general) market power persists in spite of small market shares of individual generators. It is the result of short-term transactions in very open markets that facilitate strategic decisions. The US response has been largely price caps for short-term wholesale transactions. In Germany, market power in generation is associated with high market shares and – until now – with vertical integration of generation, transmission and (partially) distribution. The latter cause of market power is likely to vanish if the new law is applied vigorously. However, market concentration can only be reduced either by rigorous application of competition policy or by increasing the electricity markets beyond the German borders. None of the German generating companies is big enough to warrant divestiture. Thus, competition policy can only prevent further increases in concentration via mergers. Increasing the geographic scope of electricity markets requires sufficient transnational transmission capacity in neutral hands. It also requires sufficient generation capacity in neighbouring countries.

One reason for market power among generating companies in California has been the lack of long-term contracts for electricity. The availability of such contracts in Germany should therefore reduce market power. However, long-term contracts signed under unfavourable terms by German communities with E.ON very recently show that long-term contracts do not always have this property.<sup>13</sup> They also make one pessimistic about the view of those communities about the market power reducing effects of the new legislation.

The potential benefits of electricity sector reforms include cost savings and demand responsiveness in generation, a better mix of generating facilities and a reduction in mark-ups for final users. In the U.S., cost savings and a better mix in generation facilities have been realised. Market power was not preventing those because of fairly easy entry into generation. Whether high market concentration in Germany prevents such entry remains to be seen. High mark-ups over costs seem to prevail in Germany for transmission and distribution as well as for generation. The newly established regulation may reduce the former mark-ups but only increased competition can reduce the latter.

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<sup>13</sup> For these contracts, see Hummel (2005).



## FAMILY POLICY IN FRANCE: OLD CHALLENGES, NEW TENSIONS

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France has a long-standing and “explicit” family policy that is overseen by government institutions and the subject of official reports produced annually. The “family” as such is legally recognised as an institution that plays an important role in the maintenance of social cohesion. The appointment of a minister responsible for family issues demonstrates the importance given to this issue.

French family policy involves a rich array of cash benefits and services. It also stands out, along with the Scandinavian countries, for its strong support of maternal employment. In a similar vein, France leads the European Union in public childcare provision and benefits aimed at reducing child care costs for families. As a matter of fact, the progressive arrival of mothers on the labour market since the 1970s has, through an interactive process, prompted family policy to introduce a whole range of services for parents in paid employment which in turn have enabled a growing number of mothers to have access to jobs. It has also helped to put the question of “social care” (Daly and Lewis 2000) for dependents firmly onto the policy agenda.

In the first section, the institutional and historical context will be presented. I shall highlight, in particular, the dynamic of the interactions at play between this policy and female employment behaviour since the 1970s. Second, I will demonstrate that although the French welfare state is often characterised as a conservative, corporatist welfare regime in most cross-national research (Arts and Gelissen 2002), it differs when child care and public support for working mothers are taken into account. In conclusion, I shall comment on what is currently at stake in French family policy.

### Family policy in France since 1945: brief historical and institutional background

A special branch of the social security administration, created in 1945, is devoted to family policy. The

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principal administration is carried out by the National Family Allowance Fund (Caisse Nationale des Allocations Familiales, CNAF), which covers more than 90 percent of all recipient families. Theoretically, the social partners (including family organisations) represented on the Executive Board of the CNAF periodically determine the orientations of the different areas for intervention in family policy. In practice, decisions are made by the government, whether approved or not by the Executive Board of the CNAF. It is solely at the local level, and only when assistance to and measures in favour of families are required, that the Executive Boards of the CAFs (local Family Allowance Funds) have any real decision-making power, and in particular, a margin for manoeuvre in the provision and development of childcare services.

The resources allocated to the family branch of social security continue to remain close to the European average. In the early 2000s, France earmarked approximately 10 percent of welfare expenditure for “families/children”. In the eighties, more than 90 percent of the resources allocated to the family sector were provided by contributions paid by employers. Over the last decade, the funding structure has undergone a profound transformation with an increase in the proportion represented by ear marked taxes and state budget spending.

Family allowances (*Allocations familiales, corresponding to Kindergeld*) represent the main cash benefit scheme. A law passed in 1975 extended its payment to all families: parents no longer needed to be in work, thus breaking with the principle of insurance-related benefits. The *Allocations familiales* are not income-related and not taxable. In accordance with a long-standing historical natalist approach, and despite constant demands from family organisations, families with only one child are denied family allowances. However, in line with one of the goals of family policy to reduce child poverty, families with one child are entitled to a means-tested benefit if the child is aged under three years (Commaille, Strobel and Villac 2002).

Family policy still bears the traces of earlier history; its system of transfers (family allowances, means-tested benefits and “*quotient familial*”) follows a long-established natalist and familialist tradition and continues to favour large families (with three or more children). Its main objective is to partly compensate for the financial cost of having children. Tax law favours couples, whether married or not, with chil-

dren. The aim is horizontal redistribution (from those with no children to those with children), an objective still supported by numerous politicians at both ends of the political spectrum.

The “*quotient familial*” operates as follows: within this family-based splitting system, the number of children is taken into account in calculating the tax liability, the total household income is divided by the number of family members, the relevant and progressive tax rate is applied to this income per adult equivalent (one “share” for an adult, one “half-share” for the first and second children, one “share” for the third and subsequent children), and the resultant sum then multiplied by the number of family members. At the same income level, a family with three children will pay less than a family with only one child. This tax system is frequently subject to criticism by trade unions and leftist political parties arguing that it should be limited to vertical redistribution, as it is in Sweden.

Contrary to the pension system, no retrenchment measures have recently been implemented in the family policy branch of the social security system (Palier 2002). This mirrors the salience of family-related issues in the social and political agenda. This also reflects the fact that the family branch and its large network of Local Allowance Funds (*CAFs*) are responsible for the management of welfare state provisions. The family branch is a transfer-heavy system which also aims at reducing social inequalities and fighting against poverty. For instance *CAFs* provide more than one million households with the Minimum Income Benefit (*RMI*) introduced in 1988. These measures are successful in reducing the poverty rate among families, in particular lone parent families. Despite the dramatic increase since the nineties in the number of welfare recipients, no real welfare-to-work programmes have been adopted.

*The progressive entry of women into the workforce: a driver for change in family policy*

Since the 1970s, against the background of an increase in mothers’ labour force participation, the work/life balance as an issue has gained increasing salience in political life and has come to the forefront of the social policy agenda. Boundaries between state, families and market have been redrawn, evidence that the progressive entry of women into the workforce has been a driver for change in the French welfare regime (Fagnani 2000).

In the post-war years, the legislators were very much concerned about the high infant mortality rate. In order to encourage mothers to stay at home, couples with at least two children were offered financial incentives in the form of the “*Allocation de Salaire Unique*” (Single Salary Allowance; Martin 1998). Until the 1960s, France promoted the male breadwinner model through generous assistance to families where only the man was in paid work. However, from the 1970s onwards, political mobilisation of women and women’s organisations played a significant role in demands for public child care facilities and services.

Against this background, political actors were inclined to win women’s votes on the basis of their support for child care provision. In the context of an acute labour shortage (there was a growing demand for qualified women to occupy jobs in the tertiary sector) policy-makers became increasingly receptive to the arguments of early childhood specialists in favour of crèches. For the first time, the programme of the Sixth Plan tackled the issue of childcare provision: local Family Allowance Funds obtained additional funding to take partial responsibility for the running costs of public childcare services, including crèches, and to improve the quality of care for infants and young children by contributing to improving the qualifications of childcare staff.

At the same time, legislators took a further decisive step with the creation of a childcare allowance for families where the mother worked outside the home. This decision was particularly symbolic in that it also decreed that the Single Salary Allowance would henceforth only be granted to low-income families. Within this context, crèches, recreational centres and holiday camps for employees’ children were also organised by several companies at the instigation of their respective works committees.

In the second half of the 1970s the rise in the number of crèche places and the increasing attendance of young children at nursery school (“*école maternelle*”) finally gave a decisive impetus to policies that were beginning to integrate the “working mother” model. The 1977 law allowed registered “childminders”, restricted until then by the vagueness and ambiguity of their positions, access to proper employee status and its associated rights. This law also marked the first steps leading to social recognition of the importance of the quality of childcare; emphasis was placed on the child’s intellectual and

emotional awakening, in order to encourage its general sense of “well-being”.

Militant action and information campaigns organised by the National Association of Nursery Nurses, doctors in the *Protection Maternelle et Infantile* (a statutory service responsible for health care of children aged under six years and supervising crèches and registered childminders) and psychologists were beginning to bear fruit. The early socialisation of young children was promoted by stressing that crèches were an “ideal” preparation for entry into nursery school. When the left came to power at the beginning of the 1980s, trade unionists and political decision-makers spoke increasingly of the need to develop a childcare policy to assist “mothers” to combine work and family life. The progressive construction of policy orientated towards working parents interacted with the change in women’s attitudes vis-à-vis paid work in a snowball effect that resulted in a rise in the number of working mothers.

The existence of the *école maternelle*, an institution created in the late nineteenth century under the Third Republic, added to the growing movement in favour of public responsibility for young children (Morgan 2002). Nearly a third of children aged under three and 100 percent of those aged three to six now attend this free, full-day *école maternelle*. The presence of a canteen and out-of-school-hours care centre have enabled more mothers to work full-time. Furthermore, local authorities have considerably developed recreational activities (leisure centres, for example) to keep schoolchildren occupied on Wednesday afternoons or after school using financial assistance from the local *CAFs*.

### **Childcare policies: A tool to fight unemployment?**

As far as childcare policies are concerned, France is much more similar to the Nordic countries than to Germany: in comparative and cross-national research, France is always one of the cluster of countries with policies that provide extensive support for maternal employment (Gornick and Meyers 2003, FFGHC 2004). Childcare policies are based on the principle that children are considered as both private and public goods. And there is a strong consensus that responsibility for children should be shared between the family and the state, which is expected to intervene not only to help families but also to protect children.

### *The move towards individualized childcare arrangements*

From 1991 to 2002 the number of places in crèches rose from 112,000 to 203,000. Despite efforts by the *CNAF* (in the form of financial assistance) to encourage local authorities to develop this type of provision, the supply of places still falls short of demand; only 10 percent of children aged under three are cared for in crèches. This shortage of places is detrimental for low-income families. For them, it is the cheapest childcare arrangement as fees in crèches are income-related and they cannot afford to rely on other formal child care arrangements, such as a nanny at home or a registered childminder, even if child care allowances help them to reduce the costs. This represents a sharp departure from one of the principles guiding public action in childcare policy: to give all children equal opportunities, irrespective of their social background.

Since the beginning of the nineties, the changes associated with increasing flexibility at the workplace (in particular the development of flexible work schedules) have led to rising demand for flexible forms of child care arrangements. In the context of rising unemployment, the government (under the regime headed by Premier Balladur, a member of one of the right-wing parties in power) therefore decided, in 1994, to exploit the job-creating potential of the childcare sector, and to dramatically increase both child care allowances and special tax breaks to help families meet the costs of “individualised” child care arrangements (childminders and home helps). It was the hope of the government to encourage families with young children to create employment and at the same time to bring more domestic workers into the formal economy. Adopting the rhetoric of “free choice for parents”, and of “diversification of childcare arrangements”, successive governments have begun to use family policy as a tool to fight unemployment.

As a matter of fact, with the aim of decreasing the unemployment rate, the government decided, in the same Family Law of 1994, to encourage economically active parents (in reality mothers) having a second child to opt for “staying-at-home” after maternity leave by providing them with an *Allocation Parentale d’Education* (APE, Child Rearing Benefit), a flat-rate benefit, on the condition that they stop working or work on a part-time basis. Since 2004, working parents with only one child are also entitled to this

benefit but only for six months after the maternity or paternity leaves. To be eligible to this benefit, parents are required to have worked or be registered as unemployed before the birth. Despite a gender-neutral discourse, 98 percent of beneficiaries are women.

This scheme is very successful among low paid mothers. This current situation bears witness to the ambiguities of family policy; measures geared at working parents are being implemented in tandem with incentive for mothers to stop working for a certain period of time, at least until the child is three years old. As a result, since the nineties, the increase in funds allocated by the CNAF towards *crèches* has been modest when compared with the much higher funding allocated to childcare carried out by individuals and to the APE.

Nevertheless, unlike Germany, it is currently quite socially acceptable for a child under three years of age to be taken care of in public day care facilities for the whole day while his/her parents are at work (Fagnani 2004). Early socialisation is even considered to be of great value, particularly by the educated middle classes. In fact the image of the *crèche* benefited from a long tradition, stretching back to the nineteenth century, of public responsibility for young children (Morgan 2002). In total, in dual-earner families, approximately seven out of ten children under three years of age attend either a *crèche* or nursery school or are the subject of subsidised childcare, whether this be a paid childminder or help in their own home or one of the two parents receiving the Child Rearing Benefit. All these figures are already beyond the targets for 2010 that were set at the European Summit of Barcelona held in 2002.

This large range of policies and schemes in favour of the work/life balance enables a better understanding of differences in mothers' labour force participation between European countries. France, along with Scandinavian countries, has one of the highest activity rates for women with children, whereas in the UK, Germany or the Netherlands, one-and-a-half earner households are the current norm. In France, among the majority of dual-earner couples with children, both partners work full-time.

For both economic and cultural reasons and as a result of the struggles by the women's movement, family policy has progressively integrated the "working mother model" and the range of measures to help working parents has recently been expanded yet

again. Public expenditures in favour of the development of child care arrangements and parental leaves have dramatically increased over the last two decades. Despite the slowdown in its expansion, the system of public *crèches* has not faced funding cutbacks. On the other hand, the progressive introduction of measures and schemes to support "working mothers" and the modernisation of child rearing norms have coalesced to justify in the eyes of couples, and more particularly women, both having children and being present on the labour market (Fagnani 2004). This also helps to account for why fertility rates in France are well above the EU average. This is partly attributable to the fact that women do not feel obliged to choose between childrearing and pursuing a career (Fagnani 2002). Where childcare norms are concerned, as a result of an interactive process, the attitudes of French women are in tune with the premises of family policy.

Recently under the socialist government, a serious attempt to change the gender relations of care within families was made; official rhetoric on family issues emphasised the right of both parents to be present with a newborn baby. This resulted in the decision to extend paternity leave (paid at full rate under a certain ceiling by health insurance) from three to fourteen days from January 2002. This was aimed at encouraging a less unequal division of unpaid work within couples. However, research has provided evidence that policies governments have been introducing since the eighties still fall short of a strong gender-egalitarian approach. Lingering assumptions about gender underpin the notion that it is legitimate for mothers to work full time unless they remain primarily responsible for managing everyday family life. Even in full-time dual-earner couples, working mothers are still expected to be less committed to their job than their partner.

This enduring asymmetry between sexes in the family partly explains the persistence of gender discrimination in the labour market. Moreover, the caring job sector remains largely female-dominated: in public childcare facilities, staffs are only female. Childminders and home helpers are also women. This maintains the idea that caring is only a woman's issue. Moreover, except in public childcare facilities, care jobs are poorly qualified and low paid.

## Conclusion

Because of intimate links to employment policy and in a context of cost-containment, policies aimed at

helping working parents are torn between the political will to promote gender equality and the social need to fight unemployment. The increase in means-tested benefits also mirrors the growing concern over social inequalities. As a result, criticisms of complexity and lack of clarity are more and more frequent. Corporatism and conflicting interests explain why successive government attempts to simplify the family benefit system have resulted in only piecemeal measures which have reinforced rather than reduced complexity.

Significant shifts have occurred over the last three decades, in particular since the beginning of the 1990s, in the area of maternal employment support, but family policy has become too complex and is still fluctuating between different and sometimes antagonistic objectives, a phenomenon which weakens its efficiency, its coherence and corrodes its social legitimacy.

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## EXPERIENCE RATING OF UNEMPLOYMENT INSURANCE IN THE US: A MODEL FOR EUROPE?

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### Introduction

Unemployment insurance (UI) is an important element of social security systems in OECD countries. Most UI systems use uniform payroll taxes to finance unemployment benefits. This method of UI financing is frequently criticised for distorting the layoff decisions of firms. Employers do not take into account the cost imposed on the UI system if workers are dismissed and become unemployed. This gives rise to too many layoffs, increasing UI contribution rates and unemployment. Moreover, these UI systems subsidise firms or sectors with high labour turnover and tax sectors with low turnover. For instance, empirical studies for Canada (OECD 2004) and Germany (Genosko, Hirte, and Weber 1999) show that the UI systems existing in these countries subsidise the construction sector and penalise service industries. This distorts the allocation of resources across sectors.

The UI system in the US tries to avoid these inefficiencies by means of experience rating (ER). ER implies that the UI contribution rate is firm specific and depends on the extent to which employees laid off by a firm claim unemployment benefits. Recently, proposals have been made to introduce ER in Europe as well.

### How does ER work in the US?

In the US, each state administers a separate self-financing UI program within guidelines established by federal law. The Tax Equity and Fiscal Responsibility Act of 1982 imposes certain restrictions on the states' UI tax structure which effectively force the states to use ER in UI financing.

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In all states, employers pay UI contributions. The contribution rate is firm-specific and is adjusted yearly. The rate rises if UI benefits claimed by former employees of a firm increase and vice versa. It varies between a lower and an upper limit that differ from state to state. The base of UI contributions is limited to a certain amount of yearly wages per employee, the contribution ceiling. In 2005, the maximum rates range from 5.4 percent of taxable payrolls in Mississippi up to 11 percent in Minnesota and the minimum rates are between 0 percent in Hawaii and 1.9 percent in Connecticut. The lowest contribution ceiling is USD 7,000 in Mississippi and the highest USD 32,300 in Hawaii. Figure 1 shows the minimum and maximum rates of selected states, as well as the contribution ceilings.

States use different formulas to determine the yearly change in the firm-specific contribution rate. At present there are four methods, the reserve-ratio, the benefit-ratio, the benefit-wage-ratio, and the payroll variation method, as well as combinations of the methods. In 2004, the UI systems of the most popular type, the reserve-ratio systems, insured 57.93 percent of covered employment in the US. A brief overview of the methods is given in Table 1.

For instance, the reserve-ratio method implies that each firm has an individual account where contributions paid are credited and benefits received by employees dismissed by the firm are charged. The difference is related to the firm's average payroll during the last three years. The firm's contribution rate depends on how this ratio develops over time. The benefit-ratio method, in contrast, only considers the ratio between benefits claimed and the firm's payroll.

Figure 1

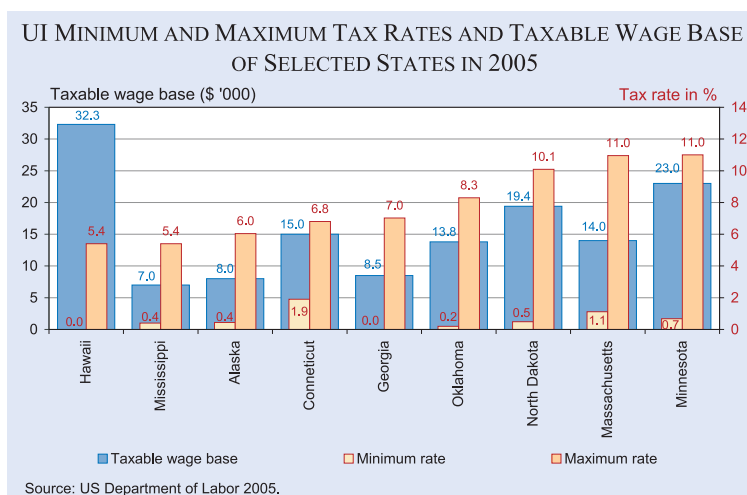


Table 1

Types of ER in the US

ER type			States*	Percentage of insured US employment (2004)
Reserve ratio	RR	$\frac{\text{firm's contributions minus benefits charged in the past}}{\text{3 years' average of firm's taxable payrolls}}$	33	57.93
Benefit ratio	BR	$\frac{\text{benefits charged (last 3 years)}}{\text{firm's taxable payrolls (last 3 years)}}$	17	40.46
Benefit-wage ratio	BWR	$\frac{\text{wage of dismissed employees (last 3 years)}}{\text{firm's taxable payrolls (last 3 years)}} * \frac{\text{total benefit payments (last 3 years)}}{\text{total wages of dismissed employees (last 3 years)}}$	2	1.39
Payroll decline	PD	firm's taxable payrolls (last 3 years)	1	0.23

Notes: The periods for which benefits, contributions and payrolls are accounted vary across states. The table shows the most frequently employed rules.  
\* Including DC, Puerto Rico and Virgin Islands.

Source: US Department of Labor (2004a and 2004b).

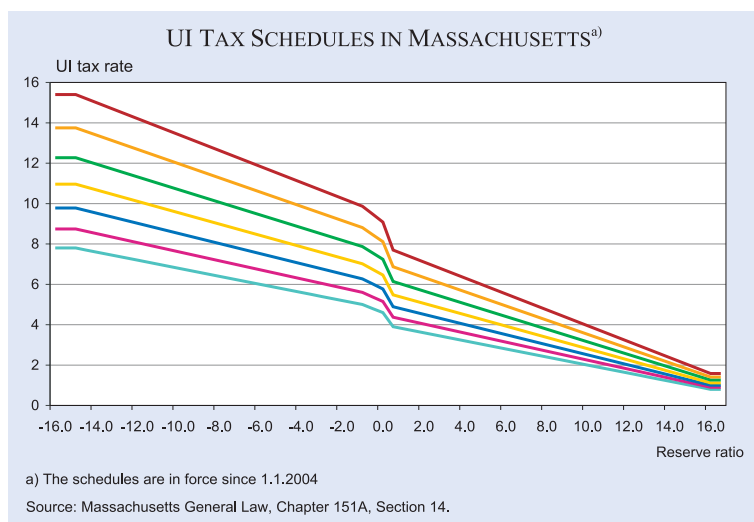
In most states, a rate schedule converts the ratio for each employer into an individual tax rate. The schedule determines the minimum and the maximum rate and accounts for the solvency of the aggregate state system. Figure 2 shows the range of rate schedules in Massachusetts. A higher fund balance triggers a rate schedule with lower rates and vice versa. Some states levy additional solvency taxes from employers in the case of low UI fund balances. Examples are given in Table 2.

There is an ongoing debate in the US about the fact that the existing UI systems are only imperfectly experience rated. The problem is that employers' contributions rise if firms lay off more workers but the rate increase reflects less than the full costs of unemployment benefits paid to the firm's former employ-

ees. If the firm is already at the maximum rate, layoffs have no further impact on UI contributions.

Incomplete ER implies that the cost a layoff imposes on the UI system is not perfectly internalised. As a result, layoffs are encouraged and firms or sectors with low layoff risks subsidise those with high risks. Tannenwald, O'Leary and Huang (1999) show that the key features of the states' UI tax structure, which determine the differences in the degree of ER between the states, are the ER method, the taxable wage base, the range of tax rates and the solvency tax rates. The ER index in Table 2 calculates the share of benefits effectively charged to employers according to their lay-off history divided by total benefit payments.<sup>1</sup> In 2002, North Dakota held the highest ER index value with 80 percent and Georgia the lowest with 14 percent.

Figure 2



What are the economic effects of ER?

Most of the debate on the economic effects of ER focuses on its impact on labour turnover, employment and welfare.<sup>2</sup>

<sup>1</sup> Non-charged benefit payments are those for which employer taxes do not fully cover the benefits charged. They also result from charges to employers who have gone out of business and from benefits which for certain reasons are excluded from charging.

<sup>2</sup> For the following and for an overview over the theoretical and empirical literature, see Anderson and Meyer (2000) as well as Cahuc and Malherbet (2004).

Table 2

## UI financing in selected states

State	Formula type	UI solvency tax	Benefits charge to employers*	ER index (2002)
Alaska	PD	/	In proportion to base-period wages	Not applicable
Connecticut	BR	/	In proportion to base-period wages	68
Georgia	RR	/	Most recent employer	14
Hawaii	RR	/	In proportion to base-period wages	51
Massachusetts	RR	0.3–0.9%	Inverse chronological order	56
Minnesota	BR	/	In proportion to base-period wages	30
Mississippi	BR	1.0%	In proportion to base-period wages	44
North Dakota	RR	/	In proportion to base-period wages	80
Oklahoma	BWR	Not specified	In proportion to base-period wages	22

Notes: A detailed comparison of the UI systems currently in force is given by US Department of Labor (2004a).  
 \* Adopted in 34 States, the most widely used charging method is the one that charges benefits to all employers in proportion to the wages earned by the worker with the employer. The principle of charging the most recent employer is applied in 12 states.

Sources: US Department of Labor (2003 and 2004a).

### *ER reduces labour turnover*

Theoretical and empirical findings (for example Topel 1983 in an empirical analysis for the US and Malherbet and Ulus 2003 in a recent theoretical analysis) suggest that an increase in the degree of ER reduces labour turnover and smoothes employment over the seasons and the business cycle. This is intuitively plausible: ER makes layoffs more costly and thus induces firms to use other methods for capacity adjustment than layoffs and hiring.

### *ER increases equilibrium employment and welfare*

Theoretical predictions on the effects of ER on equilibrium employment are less obvious. In his early contribution to the debate, Feldstein (1976) points out that ER makes layoffs more costly, so that firms will be more reluctant to dismiss workers at any point in time. But on the other hand, as Burdett and Wright (1989) emphasise, ER will also reduce job creation because firms anticipate that it will be more costly to dismiss workers in the future. More recent theoretical studies (for example Albrecht and Vroman 1999, and Fath and Fuest 2005a) find that the first effect dominates, so that overall employment increases as a result of introducing ER. Anderson and Meyer (2000) confirm this result in their empirical study for the US. There are several possible explanations for this finding. Firstly, ER induces firms to lay off fewer workers as mentioned above. Secondly, firms have incentives to support dismissed workers in their search for new employment. Thirdly, ER implies that firms have an incentive to review claims and contest those who are not really the result of a layoff. This relieves the UI fund

of unjustified claims and reduces labour costs. As a consequence of the cost reduction, overall employment rises.

In models with imperfect labour markets and involuntary unemployment, policies that increase employment will usually also enhance economic efficiency. Accordingly, most studies of the efficiency properties of ER find positive welfare effects.<sup>3</sup>

### **Would ER be a desirable element of European UI systems?**

If it is true that the costs of layoffs in terms of benefits to the unemployed should be borne by those firms responsible for the layoffs, the case for ER should be much stronger in Europe than in the US because unemployment benefit levels in Europe are usually much higher. Despite this fact, ER in Europe is the exception rather than the rule.

### *ER in Europe*

Several European countries use elements of firm-specific ER in UI financing, but its application is much less substantial than in the US. Table 3 shortly describes the respective UI financing systems.

Next to elements of firm-specific ER, there are also systems where contribution rates reflect differences in labour turnover across sectors. These systems do not try to internalise costs of layoffs at the firm level but address the problem of cross-subsidisation

<sup>3</sup> For instance, in an implicit contract model, Fath and Fuest (2005b) show that UI without ER gives rise to too many layoffs whereas an experience rated system does not have this disadvantage.



Table 3

## European UI systems with firm-specific ER

Denmark	UI funds are organised by trade unions. The UI scheme is voluntary and covers about 90 percent of the workers. Insured employees pay uniform base membership fees to the UI funds. The government subsidises the fund to balance any deficit. <i>Experience rating</i> : In the case of unemployment of the laid-off person, the employer has to pay an amount equivalent to the daily cash unemployment benefit for the first and the second day of unemployment.
France	Contributions are paid by employees and employers (total rate in 2004: 6.4 percent; employees: 2.4 percent, employers: 4 percent). The UI scheme is self-financing, contribution rates are adjusted regularly. <i>Experience rating</i> : 1. "Contribution delalande" for dismissed persons at the age of and above 50 up to a payment of 12 months of gross earnings dependent on the size of the firm and the age of the laid-off person. 2. Penalty to employers (payment of one month of gross earnings to the UI fund) for not proposing the "PARE anticipé" ("return to employment aid plan") at the beginning of the period of notice.
Germany	Employers and employees both pay proportional contributions of 3.25 percent of gross earnings to the UI fund. The government covers shortfalls of the fund. <i>Experience rating</i> : Employers compensate the fund for the amount of benefit payments to dismissed workers at the age of and above 57. The liability arises for long-term employees (more than 10 years) at large firms.
Italy	The UI contribution rate is 2.51 percent of gross earnings (employees: 0.3 percent, employers: 2.21 percent). Employers in manufacturing pay further 2.2 percent to the wage compensation fund (Cassa Integrazione Guadagni) which entitles the unemployed in this sector to higher benefits from the fund. The government balances shortfalls of the National Institute of Social Insurance. <i>Experience rating</i> : In the case of permanent collective dismissals, the employer has to pay six times the initial monthly benefit a laid-off worker is entitled to. This amount is reduced to 50 percent if the redundancy is based on a trade union agreement.
Norway	Employers' contributions are enclosed in the payment of 14.1 percent of payrolls to the social insurance system. The government balances any deficit of the UI scheme. <i>Experience rating</i> : In the case of "temporary layoffs", unemployment benefits of the first three days are borne by the employer.

Sources: European Commission (2005), European Foundation for the Improvement of Living and Working Conditions (2003), Werner and Winkler (2004), *Denmark*: Arbejdsministeriet (2001), *France*: Assédic (2004), *Germany*: SGB III, §147a (valid on 1 April 2005), *Italy*: European Commission (2003).

between sectors by levying higher contribution rates in sectors with high labour turnover and vice versa. Table 4 gives a short description of the European UI systems with sector-specific ER.

Sector-specific ER may not only reduce distortions in the intersectoral allocation of resources. It may also change the wage-setting behaviour of the trade unions. In the cases of Sweden and Finland, unions are responsible for a part of the UI funding and decide on sector-specific contribution rates. Holmlund and Lundborg (1988) show that an increase in the funding responsibility of wage-setting unions (which means an increase in the degree of sector-specific ER) reduces wages and therefore raises employment. Unions have to take into account that the premiums for their members depend on the number of unemployed fund members. This may dampen wage claims of the trade unions.

Summarising, Tables 3 and 4 show that there are some elements of ER in European UI systems, but these elements are quite weak, compared to the US. Why is there so little ER in Europe? Firstly, one might argue that employment protection legislation,

which is much more strict in Europe than in the US, serves as a substitute for ER. Secondly, ER may not be adopted because it may reduce risk sharing across firms, sectors or regions. For instance, if a sector is affected by a negative economic shock, ER will increase the cost of adjusting to this shock if this adjustment requires layoffs.

#### *Is employment protection legislation a substitute for ER?*

There are only few contributions in the literature that analyse the relationship between ER and employment protection legislation. Cahuc and Malherbet (2004) analyse this issue in a model with search frictions, minimum wages and firing costs due to employment protection legislation. In their model, introducing ER increases employment and the welfare of low skilled workers for reasonable parameter values. Fath and Fuest (2005b) consider an efficiency wage model with heterogeneous workers, where labour turnover under *laissez faire* is inefficiently high. They compare ER and employment protection legislation as alternative means of reducing labour turnover. It turns out that ER reduces labour turnover and increases employment and

Table 4

## European UI systems with sector-specific ER

Finland	UI funds are organised by trade unions. Membership in an UI fund is voluntary. 80 percent of the employees are organised in trade unions and generally are also members of an UI fund. Earnings-related UI benefits are financed by insurance premiums and via general contributions of employees (0.25 percent of gross earnings) and employers (0.6 percent up to EUR 840,940 and 2.5 percent on payrolls beyond this amount). The scheme is subsidised by the government. <i>Experience rating:</i> UI funds of the trade unions pay 5.5 percent of the daily benefit to unemployed union members. Contribution rates are yearly adjusted by the union councils. At present, the premium rate in the construction trade union is 0.5 percent of gross earnings whereas the metalworkers' union members pay 0.35 percent of gross earnings to the fund. In the 1990s, the premium rates varied across industries from 0.1 percent to 2.2 percent.
Netherlands	At present the contribution rates for the general unemployment fund (Algemeen werkloosheidsfonds) are 5.85 percent for employees and 2.45 percent for employers. Contributions to the fund for dismissal indemnity (Wachtgeldfonds) are paid by employers with varying rates across sectors. The UI scheme is self-financing. Contribution rates of the two funds are yearly adjusted. <i>Experience rating:</i> The first six months of unemployment benefits are paid from sector specific funds (Wachtgeldfonds). At present, the contribution rates to these funds range from 0.66 percent of earnings in the banking sector up to 6.62 percent in temporary employment companies.
Spain	Employers and employees both pay UI contributions. The government balances the benefit payments not covered. <i>Experience rating:</i> In the case of a permanent employment contract, the contribution rate is 7.55 percent (employees: 1.55 percent, employers: 6 percent). For fixed-term contracts, employees pay 1.6 percent and employers pay 6.7 percent for full-time work and 7.7 percent for part-time work or if the employer is an agency specialising in temporary work contracts.
Sweden	Employees may be voluntary members of one of the 38 UI funds that are mostly organised by trade unions or employer organisations. The UI scheme covers over 80 percent of the employees. Insured employees pay a specific financing contribution and employers pay 3.7 percent of payrolls. Uncovered expenditures are financed by state resources. <i>Experience rating:</i> The membership fees to the funds vary across industries. At the moment, the AEA (fund for graduates) collects an amount of SEK 1,080 (EUR 118) per year from each member whereas the fund for the construction sector takes SEK 1,416 (EUR 155) and Ledarna (fund for managers and professionals) takes SEK 2,256 (EUR 248) per year.

Sources: European Commission (2005), *Finland:* European Commission (2002), Sinko (2004), Työttömyyskassojen Yhteisjärjestö, *The Netherlands:* Uitvoeringsinstituut Werknemersverzekeringen (2005), *Sweden:* Arbetslöshetskassorna Samorganisation.

welfare. Employment protection legislation in the form of mandatory severance payments may also reduce labour turnover but has the negative side effect of reducing employment. These results suggest that employment protection legislation is a poor substitute for ER.

### The problem of risk sharing

The fact that a system of UI with full ER internalises the costs of layoffs may increase the efficiency of layoff decisions, but it may also include the cost of reducing risk sharing. If it is the purpose of UI systems to provide insurance across firms and sectors, full ER is not appropriate. Firms affected by negative shocks will usually have to dismiss workers. ER would increase the costs of this adjustment and might even lead to bankruptcies. As Blanchard and Tirole (2003) state, this suggests that UI systems should not necessarily imply full ER. A degree of ER below unity may reflect a compromise between the desirability of internalising the costs of layoffs and

the objective to provide some risk sharing with respect to layoff costs across firms and sectors. Moreover, a certain time lag between an increase in layoffs and the corresponding increase in contribution rates may be helpful to avoid ER imposing inappropriate costs on firms affected by negative shocks.

### Conclusions

The financing of unemployment benefits by uniform payroll taxes distorts layoff decisions and leads to a cross subsidisation across sectors with different labour turnover. ER makes it possible to avoid these distortions. Although there are important differences between the European and US labour markets, there are good reasons to expect significant gains from the introduction of ER in Europe. If risk sharing across firms and sectors is considered to be a desirable element of UI systems, this could be taken into account by introducing partial rather than full ER into the UI financing of European countries.

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## INTERNATIONAL RECRUITMENT OF THE HIGHLY SKILLED

Competition is keen among OECD member countries to attract human resources they lack and to retain those who might emigrate. Many countries amended their legislation in the late 1990s to facilitate the entry of skilled foreign workers and to allow foreign students to access their labour markets upon graduation. In 2001 in Switzerland, the quota for highly skilled workers was increased by almost 30 percent even though it had remained unchanged for more than 10 years prior to this. Japan and Korea share a determination to confine immigration to highly skilled workers. In the past ten years, high-skilled immigration has increased by 40 percent in Japan and more than ten-fold in Korea.

Some OECD countries have also created new programmes to facilitate the international recruitment of highly skilled workers. Norway and the United Kingdom, for instance, have introduced programmes to allow highly skilled foreign workers to come to seek work for a limited period of time. Although these programmes are still limited (approximately 5,000 persons for each country), they represent a significant change with regard to the usual migration policies of European countries, which generally require a job offer as a prerequisite for labour migration. Germany on its side has developed a special programme to recruit IT specialists, which was extended until January 2005. Approximately 15,800 permits were granted between August 2000 and January 2004. In addition, the German authorities have recently reformed their immigration law to facilitate the entry of highly skilled workers, such as engineers, computer technicians, researchers and business leaders.

In settlement countries, such as Australia, Canada and New Zealand permanent immigration is subject to a points system with an increasing emphasis on the potential immigrant's profile (age, education, skills, work experience). Permanent skilled immigration to these countries has significantly increased in the last four years (by almost 25 percent) and temporary immigration of highly skilled workers is facilitated more and more.

In addition to immigration policy measures, some OECD countries have introduced specific fiscal in-

centives to attract highly skilled migrants (Table). Some of these offer virtual income-tax-free status for up to five years for certain categories of highly qualified personnel most in need, or large tax deductions (e.g. 25 percent in Sweden, 30 percent in the Netherlands, 35 percent in Austria or 40 percent in Korea). New legislation along the same lines has been recently adopted in France and is under consideration in New Zealand.

W. O.

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## Fiscal incentives for highly skilled immigrants

Australia	In order to encourage businesses requiring a skilled labour force to locate in Australia, since 1 July 2002, foreign source income of eligible temporary residents is exempt from tax for four years.
Austria	An individual who has not had a residence in Austria during the past ten years, who maintains his primary residence abroad and has an assignment with an Austrian employer for less than five years benefits from tax deductions for up to 35 percent of the taxable salary income for expenses incurred in maintaining a household in Austria, educational expenses and leave allowances.
Belgium	Certain foreign executives, specialists and researchers residing temporarily in Belgium are eligible for a special tax regime that treats them as non-residents. Taxable income is calculated by adjusting the remuneration according to the number of days spent outside Belgium. Reimbursements of expenses incurred by an employee as a result of his temporary stay in Belgium are not subject to personal income tax.
Canada	Researchers can benefit from five-year tax relief in the province of Quebec on 75 percent of their personal income if they settle in Quebec to work in R&D in a firm.
Denmark	A special expatriate tax regime applies to foreigners employed by Danish-resident employers. Under qualifying contracts, salary income is taxed at a flat rate of 25 percent instead of the usual rates of 39 percent to 59 percent. To qualify, expatriates must reside in Denmark and earn more than 50,900 DKK a month in 2001. This tax regime is valid for up to 36 months.
Finland	A foreigner working in Finland may qualify for a special tax at a flat rate of 35 percent during a period of 24 months if he receives any Finnish-source income for duties requiring special expertise and earns a cash salary of €5800 or more per month. This law stipulates that the expert has not been resident in Finland any time during the five preceding years.
France	Recent legislation changes which aim at encouraging foreign professionals to work in France include a five-year tax exemption for bonuses paid to foreign expatriates where these are directly related to their assignment in France, and tax deductions for social security payments made by expatriates in their home countries. A deduction will also be available for pension and health care payments made outside France. It applies to foreign professionals (including French nationals with a foreign labour contract who have been residing out of France for at least ten years) coming to France from 1 January 2004.
Japan	For expatriates living in Japan, relocation allowances and once-a-year home-leave allowances are generally tax-free.
Korea	Since January 2003, tax-free allowances of up to 40 percent of salary to cover cost of living, housing, home leave and education. Tax-exempt salary for certain sectors for up to five years if the individual is i) employed under a tax-exempt technology-inducement contract or ii) a foreign technician with experience in certain industries.
Netherlands	Expatriates may qualify for a special facility called the "30 percent" (previously the "35 percent"). This enables an employer to pay for up to ten years employees seconded in the Netherlands a tax-free allowance of up to 30% of regularly received employment income and a tax-free reimbursement of school fees for children attending international schools.
New Zealand	A government discussion document, released in November 2003, outlines proposals to exempt the foreign income of certain migrants and returning New Zealanders from New Zealand's international tax regime. It is aimed at ensuring that New Zealand's tax system does not discourage the recruitment of overseas employees. The Government has proposed two possible approaches: <ul style="list-style-type: none"> <li>• A narrow exemption that would apply for seven years and focus on those tax rules that are more comprehensive than the international norm, and</li> <li>• A second option that would apply for three years and provide eligible taxpayers with a broad exemption from paying New Zealand tax on all foreign-sourced income.</li> </ul>
Norway	Expatriates expected to reside in Norway for four years or less may be allowed a 15 percent standard deduction from their gross income instead of itemised personal deductions.
Sweden	Since 1 January 2001 foreign key personnel who are experts and scientists with knowledge and skills that are scarce in Sweden may benefit from a new expatriate regime. No taxes are paid for the first 25 percent of their income. This is valid for a maximum period of ten years.
United Kingdom	Individuals who are seconded to the UK and declare their intention to remain in the UK on a temporary basis can claim tax relief on their housing costs and travelling costs. Non-ordinary residents can also claim tax relief for days worked outside the UK.

Source: UK Home Treasury (2003), Ernst and Young (2001) and national ministries.

## STRUCTURAL CHANGES OF HEALTH-CARE FINANCING

The structure of a health-care system can be characterised in several ways. One possibility is to look at the sources of financing health expenditure. There are public and private sources. The public source of financing health expenditure (or shorter: public expenditure on health) is either part of the general public tax revenues or is collected from the health insured in the form of contributions to the social (i.e. mostly obligatory and publicly organised) health insurance. The private source of health expenditure funding can be divided into three parts (as done e.g. also by the OECD): private health insurance, out-of-pocket payments and all other private means. Out-of-pocket payments are correctly mentioned under the heading of private sources. But one should be clear that out-of-pocket payments may supplement private as well as public health insurance services. The table gives a general overview.

The shares of public health financing for 1990 and 2002 are shown also in the Figure. The United States, Greece and Switzerland exhibit the lowest, Czech and Slovak Republic the highest values. Most coun-

tries are around 80 percent. The majority of countries has (slightly) lowered the share of public financing during the period of 1990 and 2002. A rather strong decrease by nearly 20 percentage points has occurred in Portugal. In the United States, by contrast, the public share has quite substantially risen from 39.6 to 44.9 percent.

The shares of private health financing are – correspondingly – low (Table). For private health insurance it is only the United States where such sources of financing health services play a major role (around 35 percent). On average, private health insurance has increased slightly its – still low – relevance for financing health services (from 6.9 percent in 1990 to 8.5 percent in 2002).

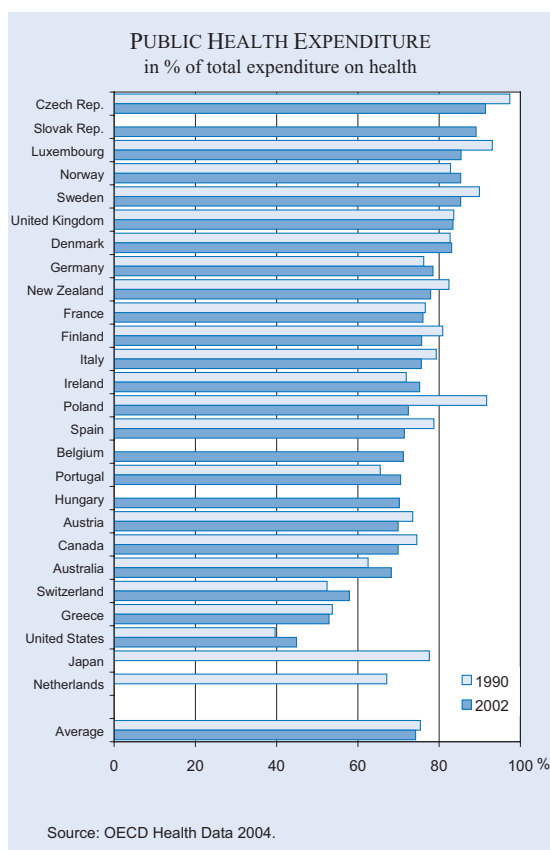
Out-of-pocket payments have been and remain to be by far the most important private source of financing health services. However, the situation and development are quite different from country to country. Switzerland and the United States had a high level of out-of-pocket payments and have reduced it. The US level is now even less than the average. By contrast, strong increases of out-of-pocket-payments have occurred in Poland, Luxembourg, Finland and Italy.

The financing structures of health-care services seem to have followed two tendencies during the 1990s: the share of public means has slightly decreased, while that of private funds has – correspondingly – increased; and the financing structures have become more similar than they were in 1990. This is reflected in the values for the standard deviation which are lower in 2002 than in 1990 (except for “other private means”). This second tendency is mainly due to the fact that countries with unusual financing structures – like the United States, Switzerland, but also the Czech Republic and Poland to a certain degree – have moved their systems in the direction of “main-stream” financing structures.

R. O.

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OECD Health Data 2004.



## Structures of financing health-care services

	Public health expenditure		Private health insurance		Out-of-pocket payments on health		All other private means	
	in % of total expenditure on health							
	1990	2002	1990	2002	1990	2002	1990	2002
Austria	73.5	69.9	9.0	7.4	n.a.	17.5	n.a.	5.2
Australia	62.5	68.2	11.4	7.6	16.6	18.5	4.9	5.4
Belgium	n.a.	71.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	74.5	69.9	n.a.	11.4	14.4	15.2	2.9	2.3
Czech Republic	97.4	91.4	n.a.	n.a.	2.6	8.6	n.a.	n.a.
Denmark	82.7	83.1	1.3	1.6	16.0	15.3	0.0	0.0
Finland	80.9	75.7	1.7	1.9	15.5	20.0	1.4	2.0
France	76.6	76.0	n.a.	12.7	11.4	9.8	1.0	1.0
Germany	76.2	78.5	7.2	8.6	11.1	10.4	5.4	2.6
Greece	53.7	52.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	n.a.	70.2	n.a.	n.a.	n.a.	26.3	n.a.	3.1
Ireland	71.9	75.2	n.a.	7.6	16.5	13.2	2.5	6.3
Italy	79.3	75.6	0.6	0.9	15.3	20.3	4.8	3.2
Japan	77.6	n.a.	n.a.	n.a.	n.a.	16.5	n.a.	5.2
Luxembourg	93.1	85.4	n.a.	1.6	5.5	11.9	n.a.	1.3
Netherlands	67.1	n.a.	n.a.	10.3	n.a.	10.1	n.a.	9.4
New Zealand	82.4	77.9	2.8	5.7	14.5	16.1	0.3	0.3
Norway	82.8	85.3	n.a.	n.a.	14.6	14.2	2.6	0.5
Poland	91.7	72.4	n.a.	n.a.	8.3	27.6	n.a.	n.a.
Portugal	65.5	70.5	0.8	n.a.	n.a.	n.a.	n.a.	n.a.
Slovak Republic	n.a.	89.1	n.a.	n.a.	n.a.	10.9	n.a.	n.a.
Spain	78.7	71.4	3.7	4.1	n.a.	23.6	n.a.	0.9
Sweden	89.9	85.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Switzerland	52.4	57.9	n.a.	10.5	35.7	31.5	1.0	1.0
United Kingdom	83.6	83.4	3.3	n.a.	10.6	n.a.	1.8	n.a.
United States	39.6	44.9	34.2	36.2	20.1	14.0	6.1	4.9
<b>Average</b>	<b>75.4</b>	<b>74.2</b>	<b>6.9</b>	<b>8.5</b>	<b>14.3</b>	<b>16.7</b>	<b>2.7</b>	<b>3.0</b>
<b>Standard deviation</b>	<b>13.8</b>	<b>11.0</b>	<b>9.7</b>	<b>8.6</b>	<b>7.3</b>	<b>6.3</b>	<b>2.0</b>	<b>2.5</b>

Note: The figures do not always add up to 100%.

Source: OECD Health Data 2004.

## TUITION FEES IN EUROPE

Now that the Federal Constitutional Court has paved the way for tuition fees in Germany, the discussion at universities and in politics is focusing on the question of how high the fees should be and when and how they should be introduced. Many European countries already have tuition fees. The models are extremely varied not only with respect to the amount paid but also the payment modus and financing.

As a result of the decision made by the Federal Constitutional Court on 26 January 2005, the introduction of tuition fees in Germany is now on the political agenda. With their introduction Germany will be following the lead of most European countries. Of 27 countries (EU countries plus Norway and Switzerland) 15 have tuition fees. There are no tuition fees in the Scandinavian countries, France, Ireland, Poland, the Czech Republic, Slovakia, Luxembourg, Malta and until now Germany. In Malta, Sweden and Slovakia, however, foreign students are required to pay tuition fees, and France charges tuition for the *Grandes Ecoles*. In the Czech Republic participants in courses of studies held in English also have to pay tuition.

The regulations for tuition fees in Europe vary considerably. While all students pay the same fees in The Netherlands, Austria and Portugal, the universities in Switzerland, Greece and Italy set the fees themselves. In Belgium it depends on the region how much the students have to pay. In Spain the fees are also regional and in some cases staggered according to subject. In Great Britain, as of 2006, students in England and Wales are required to pay between GBP 1,000 to GBP 3,000 p.a. in tuition fees. Scottish students on the other hand can study free of charge – only if they study in Scotland, however. In Hungary the government proscribes for each academic year how many students may study a certain subject at a specific university without tuition fees. All other students who want to study that subject must pay tuition fees. The universities determine how high these fees should be. In the Baltic countries tuition fees are customary. How high they are depends in Latvia on the demand for a specific subject and future career prospects. Thus a course of study in protestant theology only costs EUR 1,900 p.a., whereas the fees for business administration or law are considerably more expensive – over EUR 6,000 p.a.

Tuition fees in Europe are considerably lower than in the US. While, for example, in The Netherlands EUR 1,476 p.a. and at the *Grandes Ecoles* in France around EUR 5,500 per year are charged, the tuition fees in the US are on average between USD 12,000 and 16,000 p.a. In Harvard and Yale graduate studies cost USD 33,000 p.a. The range in Europe is very large, however, from EUR 363 per year of study in Austria up to GBP 16,000 (EUR 23,000) for a graduate programme at Britain's top universities, Oxford and Cambridge. A course of studies in the new EU member nations is not inevitably more reasonable than in the old. In Hungary, for example, tuition is EUR 2,400 p.a. In Estonia tuition is at least EUR 420 p.a. and in Lithuania up to EUR 3,350 p.a. In some cases the fees for non-EU students are considerably higher than those for nationals and EU citizens. Thus in Poland, which otherwise does not have tuition fees, foreigners at the state university in Warsaw must pay between EUR 2,000 and EUR 5,000 p.a. In Austria twice the normal fee (EUR 363 p.a.) must be paid (EUR 726 p.a.) by foreigners. Ireland, which as of 1996 no longer charges tuition fees, requires foreigners to pay up to EUR 34,250 p.a., the highest fees in Europe.

Tuition fees are collected in a variety of ways depending on the country. Either they are paid directly by the student or initially covered by the state. Not all students have to pay tuition fees. In Austria, for example, recipients of student aid (state scholarships) are entitled to a subsidy that covers tuition fees completely. The student aid paid in Portugal (scholarships) is set in such a way that it covers tuition fees. In some countries, for example Italy, students who receive scholarships based on performance and those who are socially disadvantaged do not have to pay tuition. In Spain the tuition fees are lower for students from families with several children. In UK tuition fees are paid by government for those whose incomes (the students and their immediate relatives) do not exceed GBP 22,010 p.a. In The Netherlands the government reimburses tuition fees to needy Dutch students.

N. H.



## Student tuition fees, 2005

	Tuition fees	Remarks/exemptions
Austria <sup>a)</sup>	€ 363 per semester for home students and citizens of the EU, Norway, Iceland and Switzerland. (For foreigners: € 726 per semester)	A grant is offered. Dependent on social factors. Students who receive a public scholarship (Studienbeihilfe) receive the grant automatically. Other students have to file an application.
Belgium <sup>a)</sup>	€ 726 p.a.	Flanders: Scholarships offered by government, scholarships and loans offered by universities Walloon: Scholarships and low-interest loans are offered by government
Czech Republic <sup>a)</sup>	No. (For foreigners in courses in English USD 3,000 – 6,000)	
Cyprus <sup>c)</sup>	Min. € 3,430 (Foreigners max. € 6,860)	
Denmark <sup>a)</sup>	No.	MBA courses at universities cost a fee of € 21,000 (for the duration of the course, 4–5 years).
Estonia <sup>a)</sup>	€ 420 – 1,200 per semester (Non-EU foreigners : € 960 – 1,500 per semester)	A student loan of € 1,120 guaranteed by government is offered.
Finland <sup>a)</sup>	No.	
France <sup>a)</sup>	Universities: No. Grandes Ecoles: € 5,500 p.a.	Enrolment fees between € 150 p.a. and € 290 p.a. (for doctorate).
Germany <sup>a)</sup>	No.	Prohibited by law until the Constitutional Court revoked it in January 2005. For the second course of studies or for students who need more time than usual to finish their studies, the Länder can charge tuition fees. Many Länder do so.
Greece <sup>a)</sup>	Universities define the amount of the fee.	Grants offered.
Hungary <sup>a)</sup>	€ 0 – 2,400 p.a. (Foreigners pay USD 2,000 – 4,500 p.a.) <sup>a)</sup>	80% of student gain scholarships from there university. The amount is between € 130 and € 650 p.a. Additionally student loans are available: for ten months per year every student is offered € 90 per month.
Ireland <sup>c)</sup>	None for home students and EU citizens, for non-EU students up to € 34,250.	
Italy <sup>a)</sup>	Min. € 750 p.a., the universities set the amount of the fee every year	Students who receive a public loan or a performance-related scholarship are exempt from the fees.
Latvia <sup>a)</sup>	€ 1,870 – 6,174 p.a. (foreigners pay € 2,162 – 2,822 p.a.)	A system of study loans exists.
Lithuania <sup>c)</sup>	€ 0 – 3,350 p.a. (Foreigners USD 1,300 – 6,000 p.a.) <sup>c)</sup>	Governmental programmes for study.
Luxembourg <sup>a)</sup>	No.	
Malta <sup>c)</sup>	No. (Foreigners € 1,250 – 1,500 per semester) <sup>c)</sup>	
Netherlands <sup>a)</sup>	€ 1476 p.a. (less for part-time students)	The payment of the fee is either at start of the academic year or in 5 instalments during the year. A partial payback of the fee is possible under special social conditions. All students are eligible for a compulsory scholarship of € 259 per month, which they must pay back. Furthermore, the government offers grants and low-interest loans. Government plans to enable the universities to differentiate the fees by fields of studies.
Poland <sup>a)</sup>	Public universities: No Private universities: € 110 – € 1,100 p.a. (Foreigners at the University of Warsaw € 2,000 – 5,000 p.a.)	
Portugal <sup>a)</sup>	€ 357 p.a.	Government pays a scholarship to the needy which includes the fee.

(Table continued)

	Tuition fees	Remarks/Exemptions
Slovenia <sup>b)</sup>	No fees for undergraduate programmes. Up to € 1,550 for graduate programmes.	Scholarships, grants and fellowships are offered.
Slovakia <sup>a)</sup>	No (for home students). Foreigners without a scholarship of the Slovak government pay USD 2,000 – 8,000 p.a.	
Spain <sup>a)</sup>	Public universities: € 420 – 720 p.a. (dependent on region and field of study) Private universities: up to € 6,000 p.a.	Reductions for students with many siblings. Scholarship holders can be exempt from the fee.
Sweden <sup>a)</sup>	No. (Foreigners have to pay at many universities.)	
United Kingdom <sup>a)</sup>	England/Wales: Public univ./schools: GBP 1,175 p.a. Private universities/Graduate programmes: up to GBP 16,000. Scotland: No	England/Wales: For students (and their families) with an income up to GBP 22,010 the government pays the fee. In all other cases the amount depends on the income. The House of Commons passed the law to increase the fee to an amount between GBP 1,000 and 3,000 by 2006 (Wales 2007/08). Government pays the fee. This loan is for the student payable after the study after starting to work. The amount of the claim depends on the salary. After 25 years after completion of studies, the loan for the fee will be waived. Scotland: The Student Awards Agency for Scotland pays the fee for all Scottish students (in Scotland 100%, in the other parts of the UK the amount depends on income).
Norway <sup>a)</sup>	No.	
Switzerland <sup>a)</sup>	€ 386 – 1,303 p.a.	Universities set the amount of the fee. For foreigners it is more expensive.
United States <sup>a)</sup>	The universities and colleges set the amount of the fee. The fees vary from USD 2,000 p.a. (community college) to more than USD 33,000 p.a. (graduate study/university; Harvard, Yale). The average amount is between USD 12,000 and 16,000.	A broad system of loans and scholarships exists.

<sup>a)</sup> 2.2.2005. – <sup>b)</sup> Academic year 2002/03. – <sup>c)</sup> Academic year 2001/02.

Sources: AFP, 27.1.2005; British Council; Eurydice ([www.eurydice.org](http://www.eurydice.org)); Latvijas Universitate (<http://ww1.lu.lv/gribustudet/budzeta-vietas-pam-2004.html>); Hochschulfinanzierung in Spanien ([http://evanet.his.de/infoboerse/pdf/20050107151354MV\\_SpanienHIS2004.pdf](http://evanet.his.de/infoboerse/pdf/20050107151354MV_SpanienHIS2004.pdf)); Hochschulfinanzierung in Ungarn ([http://evanet.his.de/infoboerse/pdf/20050107151511MV\\_UngarnHIS2004.pdf](http://evanet.his.de/infoboerse/pdf/20050107151511MV_UngarnHIS2004.pdf)); Hochschulfinanzierung in der Tschechischen Republik ([http://evanet.his.de/infoboerse/pdf/20050107151436MV\\_Tschechischen%20RepublikHIS2004.pdf](http://evanet.his.de/infoboerse/pdf/20050107151436MV_Tschechischen%20RepublikHIS2004.pdf)); Hochschulfinanzierung in den Niederlanden ([http://evanet.his.de/infoboerse/pdf/20050107151226MV\\_NiederlandeHIS2004.pdf](http://evanet.his.de/infoboerse/pdf/20050107151226MV_NiederlandeHIS2004.pdf)); Hochschulfinanzierung in Irland ([http://evanet.his.de/infoboerse/pdf/20050107151106MV\\_IrlandHIS2004.pdf](http://evanet.his.de/infoboerse/pdf/20050107151106MV_IrlandHIS2004.pdf)); Hochschulfinanzierung in Belgien ([http://evanet.his.de/infoboerse/pdf/20050107145632MV\\_BelgienHIS2004.pdf](http://evanet.his.de/infoboerse/pdf/20050107145632MV_BelgienHIS2004.pdf)); <http://www.euroeducation.net/>; <http://www.e-fellows.net/de/public/show/detail.php/1111>; [http://www.educationireland.ie/htm/why\\_ireland/main.htm](http://www.educationireland.ie/htm/why_ireland/main.htm); <http://www.univie.ac.at/>; [www.bmbwk.gv.at/](http://www.bmbwk.gv.at/); Socrates (<http://www.socrates.ee/et/enicnarc/korgharidus/foreign/tuition.html>); Student Awards Agency of Scotland; Department for Education and Skills; [tagesschau.de](http://tagesschau.de), 27.1.2005; [www.daad.de](http://www.daad.de); [www.eures.euregio.nl](http://www.eures.euregio.nl).

## PUBLIC DEFICITS IN EUROPE

During the run-up for euro membership the prospective partner countries managed to reduce their public deficits (Table 1). In 1998, the year preceding the introduction of the euro (1 January 1999; euro banknotes and coins were introduced at the beginning of 2002) only two countries had deficits *not* less than 3 percent, while in 1999 each of the 12 euro countries met this upper limit value, some countries even showing surpluses. (The 3 percent and 60 percent upper limit reference rules were introduced with the Maastricht Treaty of 1992, formally launching the European Monetary Union project. The Stability and Growth Pact of 1997 added to the rules that budgetary positions should normally be “close to balance or in surplus” and pro-

vided mechanisms for multilateral surveillance and enforcement.) In 2000, the average public budget balance of the 12 euro countries was even slightly positive. In meeting the other reference value, the debt to GDP ratio of 60 percent at maximum, countries were less successful when forming the euro area (Table 2). In 1999 it was only 5 out of 12 countries that met the debt standard.

The development of deficits from 2001 until 2005 took another direction than before 1999 (Table 1). The *average* public deficit of the euro countries increased continuously and became not much less than the upper limit value in 2004 and 2005 (forecast). The debt level, however, has continued to improve slightly (Table 2), being influenced not only by the budget balance but also by sales of public assets (e.g. UMTS).

**Table 1**  
Nominal budget balance in EU-12 countries (as % of GDP), 1993–2005

	Average 1993–98	1998	1999	2000	2001	2002	2003	2004	2005
Austria	-3.8	-2.5	-2.4	-1.6	0.1	-0.4	-1.3	-1.3	-2.1
Belgium	-3.8	-0.7	-0.4	0.1	0.5	0.0	0.2	-0.5	-0.8
Finland	-3.4	1.6	2.2	7.1	5.2	4.3	2.1	1.8	2.0
France	-4.4	-2.7	-1.8	-1.4	-1.5	-3.1	-4.1	-3.7	-3.6
Germany	-3.0	-2.2	-1.5	1.3	-2.8	-3.5	-3.9	-3.6	-2.8
Greece	-7.9	-2.5	-1.8	-2.0	-1.4	-1.5	-3.0	-3.2	-2.8
Ireland	-0.4	2.3	2.3	4.4	1.1	-0.1	0.2	-0.8	-1.0
Italy	-6.5	-3.1	-1.8	-0.7	-2.7	-2.4	-2.5	-3.2	-4.0
Luxembourg	2.4	3.2	3.7	6.3	6.3	2.7	-0.1	-2.0	-2.3
Netherlands	-2.4	-0.8	0.7	2.2	0.0	-1.6	-3.2	-3.6	-3.3
Portugal	-4.8	-3.2	-2.9	-2.9	-4.4	-2.7	-2.9	-3.5	-3.9
Spain	-5.1	-3.0	-1.2	-0.9	-0.4	-0.1	0.3	0.5	0.6
EU-12	-4.2	-2.3	-1.3	0.1	-1.6	-2.3	-2.7	-2.8	-2.6

Source: Flores, E. et al. (2005) and sources given there.

For 2005, only Finland's and Spain's budgets are projected to be clearly “in surplus”, while the Belgian budget, with a deficit of 0.8 percent, can be regarded as “close to balance”. All other countries will most probably miss the standards of the Stability and Growth Pact by far, and some will not even meet the laxer provisions of the Maastricht Treaty.

The usual explanation put forward by the national governments focuses on the argument that there is a current but temporary deficiency of economic growth. Budg-

**Table 2**  
General government gross debt in EU-12 countries (as % of GDP), 1993–2005

	Average 1993–98	1998	1999	2000	2001	2002	2003	2004	2005
Austria	65.5	63.7	67.5	67.0	67.1	66.6	65.0	65.5	65.3
Belgium	130.4	119.6	114.8	109.1	108.1	105.8	100.5	97.4	94.3
Finland	55.1	48.6	47.0	44.6	43.9	42.6	45.3	44.5	44.3
France	54.0	59.5	58.5	57.2	56.8	58.6	63.0	64.6	65.6
Germany	55.8	60.9	61.2	60.2	59.4	60.8	64.2	65.6	66.1
Greece	108.7	105.8	105.2	106.2	106.9	104.7	103.0	102.8	101.7
Ireland	76.3	53.8	48.6	38.4	36.1	32.3	32.0	32.4	32.6
Italy	121.4	116.7	115.5	111.2	110.6	108.0	106.2	106.0	106.0
Luxembourg	6.7	6.3	6.0	5.5	5.5	5.7	4.9	4.5	3.8
Netherlands	74.1	66.8	63.1	55.9	52.9	52.6	54.8	56.3	58.6
Portugal	60.4	55.0	54.3	53.3	55.6	58.1	59.4	60.7	62.0
Spain	63.8	64.6	63.1	61.2	57.5	54.6	50.8	48.0	45.1
EU-12	72.2	74.1	72.8	70.4	69.4	69.2	70.4	70.9	70.9

Source: Flores, E. et al. (2005) and sources given there.

et deficits are, thus, necessary in order to strengthen – instead of undermine – growth forces. Indeed, economic growth in Europe was much more favourable in 1999 and 2000 than in later years. But it was only in 2000 that on average governments of euro countries did *not* produce a *budget deficit*. And that surplus was minimal. (Cyclically-adjusted figures (not shown) give, basically, a similar picture.) Part of the current budget difficulties seems to stem from not having adhered to the rules in the better years of 1999 and 2000. Moreover, countries should accept some theoretical as well as some new empirical evidence which strengthens the (old) scepticism towards an active use of fiscal policy in stabilising the economy, let alone in the attempt to increase economic growth. One piece of evidence which specifically supports this scepticism relates to the fact that the net effect of fiscal policy in Europe between 1992 and 2003 was *pro-cyclical* (Flores et al. 2005; Buti and van den Noord 2004).

Why is the question of budget discipline so important? Because the budget positions of some countries pose a risk for the sustainability of the public finances of these countries and of the European Monetary Union as a whole. Table 3 reproduces a projection of long-term debt for the EU-15 countries, as calculated by the European Commission. Figures of such a long-term projection exercise are necessarily rather questionable. But they show what might happen if policy is not changed. The projection is made under two assumptions for the cyclically-adjusted primary balance (CAPB). In the (more favourable) “programme scenario” it is assumed that the CAPB can be held at the level of the “programme”, i.e. of the latest updated stability or convergence projection (over 5 years) of a country, while the (less favourable) “2003 budget scenario” assumes that CAPB remains at the level of the latest fiscal year.

In nearly all countries, the debt-to-GDP ratio (for both scenarios) is projected to improve, in some cases considerably, between 2003 and 2010. This might be mainly due to the assumption of budget discipline and of higher growth rates (higher than current ones, even if on a lower level than in the 1990s). The turn-around into a negative direction will occur around 2030 when the impact of ageing populations is severely felt. For

Table 3

## Long-term debt to GDP ratio in EU-15 countries, 2005

	2003	Programme scenario			2003 budget scenario		
		2010	2030	2050	2010	2030	2050
Austria	66.4	53.9	24.4	15.9	55.1	26.1	18.4
Belgium	102.3	74.8	11.5	-5.0	67.2	-35.7	-114.0
Denmark	42.7	24.6	-19.5	-34.8	6.9	-65.5	-131.9
Finland*	-14.6	-33.4	-30.1	6.0	-52.8	-79.5	-88.6
France	61.4	56.0	52.2	72.0	71.8	142.1	288.0
Germany	64.0	62.2	86.5	175.7	74.3	156.5	336.6
Greece	101.7	75.1	42.2	151.0	72.2	52.4	181.0
Ireland	33.1	26.7	36.4	105.0	27.0	50.1	138.4
Italy	106.0	86.6	28.9	-27.8	92.0	82.7	107.8
Luxembourg	4.9	-0.9	-9.4	1.2	-3.9	-35.7	-47.8
Netherlands	54.0	49.1	67.6	140.0	53.8	88.7	185.9
Portugal	59.5	48.0	5.3	-42.4	60.9	72.1	127.6
Spain	51.8	36.3	-1.6	36.6	31.6	-21.4	-12.4
Sweden*	33.0	16.4	-0.4	46.7	15.2	19.8	97.6
United Kingdom	39.3	42.5	71.6	138.7	45.3	89.5	177.5

Notes: \*Adjusted gross debt, netting off the accumulated liquid financial assets. Due to differing measurement concepts, debt figures for 2003 in Tables 2 and 3 differ somewhat.

Source: Flores, E. et al. (2005) and sources given there.

some countries this turn-around is expected to occur later. In 2050, within the programme scenario, 8 countries out of 15 will have worse debt figures – sometimes much worse – than they had in 2003.

R. O.

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## STUDENT LOAN REPAYMENT REGIMES

Student loans are those financial resources that governments (or public institutions) provide to students for their higher education and which have been earmarked for repayment. In principle, there are two major models on how students can repay their debt incurred through student loans. The first is the income-contingent loan repayment (ICLR), the second is the so-called mortgage style loan repayment (MSLR). In practice, systems can have characteristics of both models.

Income-contingent loan repayment schemes retrieve incurred debt through a percentage of a student's future earnings (i.e. the actual earnings of a graduate), often once the graduate's income has passed a certain threshold. The rate of repayment can be raised incrementally as earned income rises. For the borrower and lender it is uncertain when a loan will be fully repaid. The borrower, however, can be more confident that financial capacity is in place when repayments start and the repayment is adjusted (up and down) to changes in financial capacity.

Mortgage-type student loans have two distinctive features: the payment period is fixed for a certain number of years and the instalments that students have to pay are assessed beforehand, held stable and are based on the actual debt that is incurred.

Australia, New Zealand and the United Kingdom use an income-contingent loan repayment model. The features are very similar: loans are inflation indexed, repayment starts at a certain threshold, and the repayment is collected through the tax authorities but managed by the specific organisation that administers the students loans. If the income rises above the threshold, repayment is compulsory using a specific repayment rate. These rates and the threshold to which they are applied are, however, different. The United Kingdom uses a very straightforward system: one repayment rate (9 percent on income above the threshold) once one specific threshold amount (GBP 15,000 p.a.) is surpassed. Australia uses a more refined system, where tariffs vary between 4 percent and 8 percent of income depending on the income level. New

Zealand's repayment rate is 10 percent on income above the threshold of NZD 16,588 (Table).<sup>1</sup>

In the remaining countries, all repayment schemes follow more or less the traditional mortgage structure. Debts are paid back over a certain fixed amount of time. Monthly instalments are also fixed. The Netherlands use income-related components. Repayment may be reduced for one year after a means test has been passed.

In either system various important design features can vary: the repayment period, the interest rates that are charged on loans, the management and collection of the loan and conditions that apply in case of deferment of or defaulting on the loan. In all countries a period of time is allowed to pass before repayment must begin. The length of this time period is negotiated either between the lender and the borrower or it may be stipulated by the government. The time allowed normally ranges between six months and two years. Time limits for repayment vary between five years for Belgian and Italian graduates and extend up to 25 years in Sweden and the United Kingdom. In some cases the obligation to repay the debt ends when an age limit is reached. Loan repayment in Australia, New Zealand and Canada is in principle not restricted by a time limit.

Interest rates can be set at different levels, varying from zero percent to an inflation-index rate and market-based interest rates. In practice, a zero percent rate is an exception (Italy). Inflation-indexed rates are found in the United Kingdom, Australia and to some degree in New Zealand. Some countries tie the interest of student loans to that of government bonds. In general the interest rates are below those of the common market interest rates for private loans. The period over which interest rates are charged can differ as well. Loans can be burdened with interest immediately after being initiated. Interest rates can be charged upon the conclusion of study. Or the rates apply when the actual repayment starts.

Governments can manage and collect the student loans through different organisations and mechanisms. Managing loans basically has to do with administering repayment, setting up payment schedules and determining conditions for deferment or defaulting. Collection refers to the actual repayments through a designated mechanism. Two alternatives prevail: In the case of ICLR the functions of management and collection have been separated. It is very important to

<sup>1</sup> The US offer an ICLR in addition to their traditional type of repayment (MSLR). Sweden has actually returned to the MSLR to decrease the probability of loan defaulting because of much longer repayment periods.

keep track of income levels, which is why tax authorities are often responsible for assessing income, the related amount of repayment and the actual collection of the money. The student loan company is responsible for providing loans. In the case of MSLR a student loan company can be responsible for both management and collection of repayment. This company can either be a public agency or a private organisation contracted for this purpose by the government. In these systems management and collection are often combined.

If payment difficulties arise, a variety of solutions are implemented. In Great Britain, Australia and New Zealand the direct debiting is automatically stopped or reduced if the income falls below the income threshold. In Sweden it is possible to apply for a reduction of the loan depending on income and the age of the applicant. In The Netherlands payment can be interrupted for up to a year depending on the income. When financial difficulties arise, the Canadian government will pay the interest payments for the debtor. In Canada it is also possible for the repayment rate to be reduced for up to 15 years.

N. H. and W. O.

## Repayment of public student loans

	Repayment (in relation to income)		Repayment period		Interest rate		Management of repayment	Remarks
	Rate	Conditions	Start	Duration	Level	Timing		
Income-contingent loan repayment schemes (ICLR)								
Australia	4%-8% of HRI <sup>(1)</sup> depending on income	Income must exceed AUD 36,185 p.a.	When income threshold is reached.	No limit.	Indexed by Consumer Price Index	AD, until full repayment	Australian Tax Office	
New Zealand	10% of income above threshold	The threshold is NZD 16,588 p.a.	When income threshold is reached.	No limit.	7% p.a. (1.5% interest adjustment rate, pegged to inflation, 5.5% base interest rate).	n.a.	Inland Revenue	
United Kingdom	9% of income above threshold	Income must exceed GBP 15,000 p.a.	In May after finishing or leaving course; when income threshold is reached	Max. 25 years. The government will write off any part of the loan that is left unpaid 25 years after leaving the course.	Indexed by inflation rate.	AD	Inland Revenue	If the income falls below the threshold of GBP 15,000, the debtor will not have to make any payments until the income rises above it.
Mortgage-type student loans (MSLR)								
Belgium (Walloon)	-	-	1 April of year after finishing or leaving course.	Five years.	4% p.a. (12% as long as there is a default of repayment).	AR	Government of Walloon	
Denmark	-	-	One year after the end of the year in which the student graduates or leaves course.	Max. 15 years.	4% p.a. during course of study; after finishing: discount rate of the Danish Central Bank plus 1 percent point.	AD	Statens Uddannelsesstøtte (public agency)	
Estonia	-	-	At least one year after the borrower graduates or leaves school or university.	Twice the tuition time.	5% p.a.	n.a.	Private banks	Guaranteed by government.
Italy	-	-	n.a.	Five years.	0%	n.a.	n.a.	60% of the amount is a grant and 40% is to repay.

(Table continued 1)

	Repayment (in relation to income)		Repayment period		Interest rate		Management of repayment	Remarks
	Rate	Conditions	Start	Duration	Level	Timing		
Netherlands	EUR 45 per month	–	Two years after finishing the course of study.	Max. 15 years.	Dutch government bonds based rate (2004: 3,35%).	ID	Informatie Beheer Groep (Independent Public Agency)	When a graduate has problems repaying their debt, they can ask for an annual means test. This may reduce their repayment obligations (even to zero) for one year. All debt that remains after the 15-year repayment period is cancelled.
Poland	–	–	One year after graduation, however, not later than on October 1 of the year following the year in which the student is supposed to graduate in accordance with the schedule.	Twice the tuition time.	3.25% p.a.	n.a.	Private banks.	Guaranteed by government.
Sweden	–	–	Six months after student last received any form of study assistance.	25 years or until the age of 60.	3.1% p.a.	AD	CSN (Swedish National Board of Student Aid)	It is possible to apply for a reduction of the annual amount to 5 percent of income. As of the age of 50 the annual amount can be reduced to 7 percent of income.
Switzerland (Basel)	–	–	Dependent on individual repayment schedule.	Max. 12 years.	4.5% p.a.	AS	Department of Education.	Minimum yearly repayment rate is 1/12 of the loan amount, but min. CHF 2,400.
Canada (Ontario)	–	–	Six months after student completes studies or stops being a student.	n.a.	Variable.	AS	National Students Loans Service or private banks.	If there are repayment difficulties: A revision of terms can extend the repayment period for up to 15 years, thereby lowering the monthly payments. There are further possibilities in cases of low income: interest relief (the government pays the interest) and "Debt Reduction in Repayment"-programmes by the government of Ontario and the government of Canada. If a debtor does not make his payments, debt will be turned over to a collection agency and the default will be reported to a credit bureau; as a result, the ability to obtain credit may be impaired.



(Table continued 2)

	Repayment (in relation to income)		Repayment period		Interest rate		Management of repayment	Remarks
	Rate	Conditions	Start	Duration	Level	Timing		
United States	-	-	Federal Perkins Loan: Nine months after graduation.	Up to ten years.	5% p.a.	n.a.	Universities.	For several reasons there are possibilities for deferment and forbearance of the repayment. During forbearance, the payments are postponed or reduced, or the repayment period might be extended. Interest continues to accrue, however, and the debtor is responsible for paying it. Further MSLR available.

Note: AD: after loan disbursement. – AR: at start of repayment. – AS: after finishing studies.

<sup>a)</sup> HRI: Taxable income plus any net rental losses, total reportable fringe benefits and exempt foreign employment income.

Sources: Australian Government, Australian Taxation Office (<http://ato.gov.au/youth/>), 21 April 2005; Australian Government, Department of Education, Science and Training (<http://www.goingtouni.gov.au/Main/FeesLoansAndScholarships/Undergraduate/Loans/HECSHELP.htm>), 21 April 2005; Bank Pekao S.A., ([www.pekao.com.pl/indywidualni1.xml?lang=US/700131-861184-93442](http://www.pekao.com.pl/indywidualni1.xml?lang=US/700131-861184-93442)), 21 April 2005; Communauté française de Belgique (<http://www.cfwb.be/allocations-etudes/Pg004.htm>), 21 April 2005; CSN (<http://www.csn.se/english/default.asp>), 21 April 2005; CSN, Information on Swedish Student Aid, CSN Faktablad 2005; Department for Education and Skills, A Guide to financial support for higher education students in 2005/2006, London, January 2005; Eesti Ühispank (<http://www.seb.ee/index/1301>), 22 April 2005; Informatie Beheer Groep (<http://www.ib-groep.nl/>), 21 April 2005; Ministry of Social Development New Zealand, StudyLink (<http://www.studylink.govt.nz/>), 21 April 2005; Ontario Students Assistance Program ([http://osap.gov.on.ca/eng/not\\_secure/repay.htm](http://osap.gov.on.ca/eng/not_secure/repay.htm)), 22 April 2005; Portalino (<http://www.portalino.it/muke/modules.php?name=News&file=article&sid=4828&newlang=italian>), 22 April 2005; Rand Europe, A Broad International Comparison of Student Loan Systems in Ten Countries, Leiden 2003; Statens Uddannelsesstøtte (<http://www.su.dk/index.html?/m-english/default.html>) 22 April 2005; U.S. Department of Education, The Student Guide ([http://www.studentaid.ed.gov/students/publications/student\\_guide/2003\\_2004/english/types-campusbased.htm](http://www.studentaid.ed.gov/students/publications/student_guide/2003_2004/english/types-campusbased.htm)), 22 April 2005.

## DEPOSIT INSURANCE

Insurance systems for bank deposits have made a remarkable development since the 1960s. While in 1960 only three countries had introduced an explicit deposit insurance system, today the number amounts to 75. An especially dynamic development occurred during the 1980s and 1990s, when the number of deposit insurance countries increased by 21 and 30, respectively (Figure).

Deposit insurance is in many countries an important corner stone of a safety net for the national financial system. And it is not astonishing that the financial crises of the 1980s and 1990s led many countries to update their financial safety net, also by adopting deposit insurance.

The costs of a large-scale (“systemic”) financial and banking crisis are multi-faceted and can be enormous. The costs have to be borne by depositors, good borrowers, prudent banks, potential issuers of debt and equity instruments, as well as by the taxpayers. But it is not only these fiscal costs. The society as a whole suffers in the form of halted growth and development programmes, and increased poverty. Fiscal costs have been estimated to be approximately 30 percent of GDP for the financial crises of Thailand and South Korea in 1997, while for Indonesia the budgetary costs alone might have even approached 50 percent of GDP.

Deposit insurance – together with other forms of a financial safety net, like bank regulation and supervision, bank insolvency resolution procedures and lending of last resort of the central bank – is plausibly seen as contributing to avoiding the costs of financial crises. However, it would be erroneous to believe that de-

posit insurance comes without costs: Depositors face fewer incentives to monitor their banks, and banks might feel tempted to engage in excessive risk-taking. Explicit deposit insurance might, thus, lead banks to incur higher instead of lower risks. Moreover, the development of the national capital market, specifically the equity market, might be negatively influenced by deposit insurance systems.

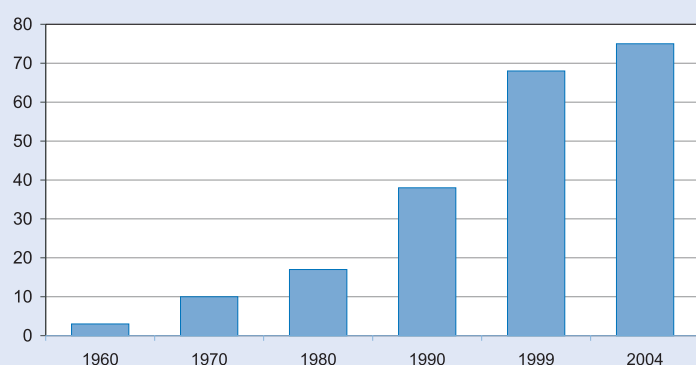
The latter argument is empirically substantiated by a recent analysis (Cecchetti and Krause 2004) which shows that countries with explicit deposit insurance and a high degree of state-owned banks (implicit insurance) have smaller equity markets, a lower number of publicly traded firms and a lower amount of bank credit to the private sector.

The trade-off between potential systemic crises due to no safety net (e.g. no deposit insurance) and the negative effects of moral hazard for banks and depositors due to deposit insurance (i.e. low market discipline) is unavoidable. But more or less favourable compromises might be possible. A good compromise seems to depend crucially on the details of the design of the deposit insurance. The Table, concentrating on European countries, presents some of the relevant design details. The whole informational base, resulting from a World Bank research initiative on deposit insurance, is much larger, containing more variables and more countries (for the source, see Table).

In their empirical study using the data base, Demirgüç-Kunt and Huizinga (2004) have found that high explicit and broad insurance coverage, government provision of funds and public management of deposit insurance lead to lower required deposit rates for attracting funds and to reduced market discipline.

R. O.

NUMBER OF COUNTRIES WITH EXPLICIT DEPOSIT INSURANCE SYSTEMS  
1960–2004



Source: Demirgüç-Kunt and Kane (2001); [www.worldbank.org/research/projects/bank\\_regulation.htm](http://www.worldbank.org/research/projects/bank_regulation.htm)

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**Deposit insurance in Europe: Characteristics of explicit deposit insurance**

Country	Date established	Coverage limit	Foreign currency deposits covered	Interbank deposits covered	Annual insurance premiums	Management	Membership
Austria	1979	260,000 ATS	yes	no	Callable	private	compulsory
Belgium	1985	15,000 ECU	no	no	0.0002 of deposits from clients	joint	compulsory
Denmark	1988	300,000 DKR	yes	no	0.002 of insured deposits, max.	joint	compulsory
Finland	1969	150,00 FIM	yes	no	0.0005-0.0030 of insured deposits	private	compulsory
France	1980	400,00 Fr	yes	no	Callable	private	compulsory
Germany	1966/1998	Private: 30% of capital; official co-insurance: 90% to 20,000 ECU	yes	yes	Official is 0.03, but can be doubled	private	compulsory
Greece	1995	20,000 ECU	yes	no	0.00025-0.0125 of eligible deposits	joint	compulsory
Hungary	1993	1,000,000 Ft	yes	no	0.003 of insured deposits, max.	public	compulsory
Ireland	1989	90% of 20,000 ECU	yes	no	0.002 of insured deposits	public	compulsory
Italy	1987	100% of first 200 Mil. ITL	no	n.a.	0.004-0.008 of insured deposits	private	voluntary
Luxembourg	1989	15,000 ECU	yes	no	Callable	private	compulsory
Netherlands	1979	20,000 ECU	yes	no	Callable	public	compulsory
Spain	1977	15,000 ECU	yes	no	0.0002 of deposits, max.	joint	compulsory
Sweden	1996	250,000 SEK	yes	no	0.005 of deposits and 0.001 callable	public	compulsory
United Kingdom	1982	75% of 20,000 GBP	yes	no	Callable	private	compulsory
Norway	1961	2,000,000 NOK	yes	no	0.00005 of assets and 0.0001 of deposits	private	compulsory
Switzerland	1984	30,000 SwF	no	no	Callable	private	voluntary

Source: Demirgüç-Kunt and Huiznga (2004) and sources given there; [http://www.worldbank.org/research/Projects/bank\\_regulation.htm](http://www.worldbank.org/research/Projects/bank_regulation.htm); [http://www.worldbank.org/research/interest/conf/upcoming/deposit\\_insurance/home.htm](http://www.worldbank.org/research/interest/conf/upcoming/deposit_insurance/home.htm).

## RECENT ENTRIES TO THE DICE DATABASE

In the second quarter of 2005 the DICE Database ([www.cesifo.de/DICE](http://www.cesifo.de/DICE)) received about 70 new entries, consisting partly of updates of existing entries and partly of new topics. Some topics are mentioned below:

- Taxing Wages
- Economic Weight of Nations (I-III)
- Public Pensions: Supervision, Authorities and Principles
- Stock Exchanges: Supervision, Taxes
- Housing Benefits/Family Benefits
- Hiring and Firing Workers
- Tax Burden of Companies
- Private Pensions Funds
- Family Benefits
- Unemployment Assistance Benefits

## GLOBAL ENTREPRENEURSHIP MONITOR

The Global Entrepreneurship Monitor (GEM) research program is an annual assessment of the national level of entrepreneurial activity. Initiated in 1999 with 10 countries, it was expanded to 21 in 2000, 29 in 2001 and 37 in 2002. GEM 2005 will conduct research in 39 countries.

The research programme, based on a harmonised assessment of the level of national entrepreneurial activity for all participating countries, involves exploration of the role of entrepreneurship in national economic growth. Systematic differences continue, with few highly entrepreneurial countries reflected in sustained economic growth. There is, further, a wealth of national features and characteristics associated with entrepreneurial activity.

Those interested in the research programme will find global comparisons, national reports and special topic reports based on the annual data collection cycle. For more information, contact Babson College, London Business School, UK.

## PRIVATIZATION BAROMETER

The Privatization Barometer is the first Internet portal on privatization and its most recent development in old and new Europe (the first 10 CEEC accession countries are included).

The project is currently funded by Fondazione IRI (a non-profit independent research institution founded in 2002 by the former State Holding Company IRI) and Fondazione Eni Enrico Mattei – FEEM (a non-profit research institution established in 1989), a leading international economic research centre.

The aim of the project is to create a unique and independent source that reports comprehensive information on the historical process of privatization, as well as on recent and future trends; to provide a focal point for an international audience of researchers, enterprises, analysts, consultants, international agencies, governments, policy-makers and media; and to establish an open forum on privatization choices and their consequences firmly based on research outputs. See Fondazione Eni Enrico Mattei-FEEM, Milano, Italy.

## CONFERENCES

### Kiel-Munich Workshop on the Economics of Information and Network Industries

Rapid progress in information and communication technologies stirs up modern economies as do the liberalisation and deregulation of traditional network-based industries. These developments pose new challenges for economic theory and economic policy. Thus, there is a growing body of both theoretical and empirical literature focusing on these issues.

Once again, on 15 – 16 August 2005, the Center for Information and Network Economics at the University of Munich and two of the leading German economic research institutes, the Ifo Institute for Economic Research, and the Kiel Institute for World Economics will dedicate a workshop to this important research topic.

The workshop, which will take place in Munich, will concentrate on the following topics:

- Increasing Returns, Network Externalities, Switching Costs.
- Market Structure, Product Differentiation and Pricing Strategies.
- Industry Studies on Hardware/Software, E-commerce and the Internet.
- Industry Studies on Telecommunication, Energy and Transport Networks.
- Innovation, R&D and Intellectual Property in Network Industries
- National and International Regulatory Policy, Anti-trust Issues, Private Sector Initiatives.

## DOING BUSINESS METHODOLOGY

The methodology for the Doing Business Database of the World Bank is developed in the following articles:

- Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer (2002), "The Regulation of Entry", *Quarterly Journal of Economics* 117, 1-37.
- Juan Botero, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer (2004), "The Regulation of Labor", *Quarterly Journal of Economics*, November.
- Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny (1998), "Law and Finance", *Journal of Political Economy* 106, 1113-55.
- Simeon Djankov, Caralee McLiesh and Andrei Shleifer (2004), "Private Credit Around the World", Harvard University, July.
- Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer (2003), "Courts", *Quarterly Journal of Economics* 118, 453-517.

**DICE**  
***Database for Institutional Comparisons in Europe***  
**[www.cesifo.de/DICE](http://www.cesifo.de/DICE)**

The database DICE was created to stimulate the political and academic discussion on institutional and economic policy reforms. For this purpose, DICE provides country-comparative information on institutions, regulations and the conduct of economic policy.

To date, the following main topics are covered: Labour Market, Public Finances, Social Policy, Pensions, Health, Business Environment, Capital Market and Education. Information about Basic Macro Indicators is added for the convenience of the user.

The information provided comes mainly in the form of tables – with countries as the first column –, but DICE contains also several graphs and short reports. In most tables all 25 EU and some important non-EU countries are covered.

DICE consists mainly of information which is – in principle – also available elsewhere. But we think that the access we provide is very convenient for the user, the presentation is systematic and the main focus is truly on institutions, regulations and economic policy conduct. However, some tables are based on empirical institutional research by ifo and CESifo colleagues as well as the DICE staff.

DICE is a free access database.

Critical remarks and recommendations are always welcome.  
Please address them to  
[osterkamp@ifo.de](mailto:osterkamp@ifo.de)  
or  
[ochel@ifo.de](mailto:ochel@ifo.de)

