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ABSTRACT

Before and After the Hartz Reforms: The Performance of Active Labour Market Policy in Germany*

Having faced high unemployment rates for more than a decade, the German government implemented a comprehensive set of labour market reforms during the period 2003-2005. This paper describes the economic and institutional context of the German labour market before and after these so-called Hartz reforms. Focussing on active policy measures, we delineate the rationale for reform and its main principles. As results of programme evaluation studies post-reform have become available just now, we give a first assessment of the effectiveness of key elements of German ALMP before and after the Hartz reforms. The evidence indicates that the re-organisation of public employment services was mainly successful, with the exception of the outsourcing of services. Re-designing training programmes seems to have improved their effectiveness, while job creation schemes continue to be detrimental for participants' employment prospects. Wage subsidies and start-up subsidies show significantly positive effects. On balance, therefore, the reform seems to be moving the German labour market in the right direction.

JEL Classification: J0, J68, J88

Keywords: Active Labour Market Policy, labour market reform, programme evaluation

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1. Introduction

In times of high unemployment, the necessity of labour market reforms is discussed all over Europe. Many countries have either started or already finished far-reaching reforms. Also in Germany the need for reforms had become apparent over the past decades, when unemployment was rising constantly and public budgets tightened. Finally in 2002, the government took advantage of a scandal involving the federal employment office² to overcome the so-called *reform logjam* ("Reformstau") and start a series of rather radical – given the prior reluctance – policy changes.

The resulting *Hartz reforms* – named after the chairman heading the commission that worked out the reform package – constitute a comprehensive modification of active and passive labour market policies. It is considered the most far-reaching reform endeavour in the history of the German welfare state, and consists of four laws *Hartz I-IV* that were gradually implemented on Jan 1st 2003 (Hartz I and II), Jan 1st 2004 (Hartz III), and Jan 1st 2005 (Hartz IV). The laws contain a comprehensive set of specific policy measures that came into force at various points in time during the years 2003 – 2005, and that merge to a three-part reform strategy: (a) improving employment services and policy measures, (b) activating the unemployed, and (c) fostering employment demand by deregulating the labour market. To this end, the reform radically modernised the organizational structure of public employment services, modified many of the already existing measures of Active Labour Market Policy (ALMP) and introduced a set of new ones. The reform fundamentally changed the institutional and legal framework that determines the rights and duties of the unemployed, most importantly, the benefit system. Furthermore, employment protection was reduced in some segments of the labour market.

In this context, it is also the first time in the history of the German welfare state that a policy reform is accompanied by a comprehensive scientific evaluation. The government explicitly tied the implementation of the Hartz laws to an evaluation mandate. Given the scope of the reform endeavour, the evaluation was commissioned by the government as a set of work packages and modules, aiming at an evaluation of both the Hartz reforms in their entirety and each particular element on its own.³ In practice, the Hartz evaluation therefore has involved more than 20 economic and sociological research institutes who, using methods based on qualitative case study approaches as well as rigorous econometric analyses of administrative and survey data, face the challenge of disentangling impacts of specific

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² The federal employment office was accused of massive fraud in the reporting of successful job placements.

³ Fertig and Kluve (2004) develop a conceptual framework for this endeavour.

measures in a setting characterised by (a) the simultaneous alteration of measures *and* institutional context, and (b) by the fact that many measures affect every worker, i.e. no comparison group exists. First results of these evaluation studies have become available just now.

In this paper, we describe the economic and institutional context of the German labour market before and after the reform. Focussing on active policy measures, we delineate the rationale for reform and its main principles. We use the most recent empirical evidence to discuss the effectiveness of key elements of German ALMP before and after the Hartz reforms.

The paper is organized as follows: Section one gives an overview of the German economic situation since unification in 1990, briefly characterizing the problematic features of the East and West German labour markets. We also describe the institutional framework before Hartz, focussing on active labour market policies and the organisational structure of public employment services, and discuss the main weaknesses of the institutional setting that motivated the reform. Section three delineates core elements of the Hartz reforms and the reform strategy in some detail. In section four we review both the hitherto existing and the most recent evidence from evaluation research to assess the effectiveness of active labour market policy before and after the reform. Section 5 concludes.

2. Economic situation and labour market institutions before Hartz

Since the 1990s, Germany has shown to be unable to benefit from favourable conditions in the global economy. From 1991 until 2003 GDP grew by only 18%, which is half the growth of the United Kingdom (35%) or the Netherlands (34%) during that period. Low growth rates have been unable to create employment. Employment even slightly decreased (by 0.4%) and unemployment rates are higher than ever, currently ranging between 9.6 % in the West and 18.6 % in the East.

Certainly the unification in 1990 and its repercussions have contributed to Germany's poor performance. Unification suddenly increased the labour force by roughly one third of workers, a large share of which was inadequately trained for immediate employment in an open market economy. Despite the need to first retrain the labour force and reshape the formerly centrally planned economy, however, it was a core political objective to adjust East German wages to the comparatively high West German levels as quickly as possible. In contrast to other Central and Eastern European transition countries having competitive wages

levels to create sustainable growth, the East German economy experienced rising unemployment and continuing dependence on federal subsidies and transfer payments from West to East. Apart from the high fiscal costs of unification, the Maastricht criteria reduced the government's scope for expansive growth policies further.

Only a small share of overall German unemployment is thought to be attributable to business cycle factors. Some studies argue that the German NAIRU has increased over the past decades (e.g. Franz 2003), indicating that structural factors play an important role in the German unemployment problem.

Figure 1 shows the development of unemployment and the number of participants in training and job creation programmes for West and East Germany during the time period 1991 to 2005. We observe a general increase in the number of unemployed individuals in both parts of the country. Whereas in West Germany the number of programme participants has been relatively stable over this period, decreasing only slightly, the figures for East Germany document the massive use of ALMP measures during the early 1990s and a substantial decrease over recent years.

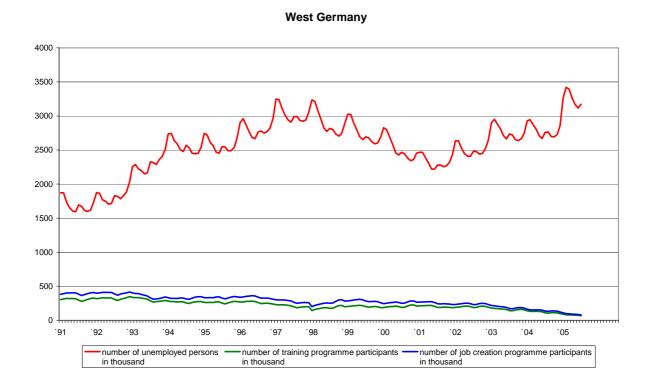
Labour market institutions

Compulsory unemployment insurance was introduced in Germany as early as in 1927, complementing the then already existing insurances for health, accident and old age. After World War II a generous benefit system, financed by contributions and taxes, emerged. Active labour market measures were introduced when unemployment started to rise in the 1970s. Both active and passive policy measures are administered by the federal employment office. In earlier years, when unemployment was still low, measures were designed to prevent rather than fight unemployment, adapting the workforce to structural changes in labour demand. After unification in 1990, active labour market measures played a central role in alleviating the social consequences of the breakdown of the economy in East Germany. In 1991, one third of the East Germany workforce had participated in an active measure, mainly training and public job creation schemes (cf. Wunsch 2005).

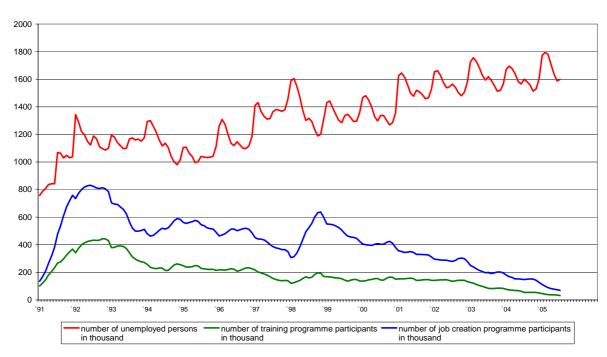
The set-up of active and passive labour market policy in Germany during the 1990s can be characterised as follows: From the very beginning, unemployment benefits were meant to maintain the worker's social status during unemployment rather than providing a safety net of last resort. All payments made to the individual over the entire period of unemployment were linked to his or her previous earnings. Unemployment benefits, which were paid for the first 6 to 32 months of unemployment (depending on previous employment duration and age),

amounted to 67% of the last net income (60% without children), with a maximum level of 4250 EUR per month. Unemployment assistance, which was paid thereafter without time limit, still reached 57% (53%) of the last net income.

Figure 1. Unemployment and ALMP participation in Germany



East Germany



Source: IAB Nürnberg.

The unlimited duration of unemployment benefit payments was an extraordinary feature of the German unemployment benefit system, leading to replacement rates for long term unemployed which were higher than in any other OECD country (OECD 2004). Replacement rates of short-term unemployed, in contrast, were – and still are – comparable to many other OECD countries. Unemployment benefits were financed by unemployment insurance contributions shared by employers and employees, while unemployment assistance was financed by taxes. In principle, unemployment assistance was means-tested on a yearly base. It was possible to complement unemployment insurance by tax-financed social assistance. Generally, every household whose income fell below a certain income threshold qualified for social assistance. The German benefit system combined generous benefit levels with high benefit reduction rates that taxed away most of the additional earned income of a benefit recipient. Thus, incentives to take up a job were very low, especially for low skilled workers. Engels (2001) calculates that a typical family with three children receiving social assistance in West Germany in the year 2000 received an income that was only 15.3% below the income of a comparable family with a single earner receiving an average unskilled worker's wage. In East Germany the respective difference was only 11.5%.

Compared to other countries, German active labour market policy in the 1990s was characterised by high expenditure levels and long durations of programmes. Training and public job creation measures were the most important programmes in terms of expenditures and number of participants. Measures supporting the direct integration into regular employment (e.g. wage subsidies and start-up subsidies) only played a minor role. Generally, job search assistance and monitoring by the public employment agency was given rather low priority. Sanctions for low engagement in job search activities were rarely implemented. For most programmes, the law narrowly defined the type of person who was eligible for participation in a programme. Assignment to programmes was not based on a systematic profiling of each costumer, but rather on caseworkers' discretion.

3. Core elements of the Hartz reforms

As unemployment continued to increase in the 1990s, the social security system ran the risk of financial collapse and the need for a comprehensive reform of the institutional setting of labour market policies became urgent. In both the political and academic debates the benefit system was criticised for creating adverse work incentives and increasing long-term unemployment, deteriorating skills and thus worsening the mismatch on the labour market.

The public employment services were blamed for operating inefficiently and customerunfriendly and failing to push jobseekers sufficiently to search for a job. The mix of active measures, focusing on training measures and public job creation schemes with long durations, was criticised for retaining participants out of the open labour market instead of integrating them. Such criticism was based on evaluation studies of active measures that indicated severe locking-in effects and zero or even negative post-participation treatment effects of many programmes.

In 2002 the government reacted to, and took advantage of, a scandal involving the federal employment office⁴ by setting up an independent expert commission, the "Commission for Modern Labour Market Services" (*Kommission für Moderne Dienstleistungen am Arbeitsmarkt*). The commission's recommendations triggered a series of radical policy changes, the so-called Hartz reforms⁵, which were subsequently implemented during the time period 2002-2005. The set of reform elements coalesce to a tripartite reform strategy (cf. Table 1). They aimed at, (a) improving labour market services and policy measures in terms of effectiveness and efficiency, (b) activating the unemployed by enforcing the so-called principle of "rights and duties" (*Fördern und Fordern*), and, (c) fostering employment demand by deregulating the labour market⁶.

Table 1. Cornerstones of the Hartz reforms

- a) Increasing effectiveness and efficiency of labour market services and policy measures
- Re-organisation of local employment agencies
- Introduction of quasi markets
- Improved targeting
- Evaluation mandate

- b) Activating the unemployed
- Re-organisation of the benefit system
- Sanctions
- New policy mix with priority to measures requiring proactive behaviour of the unemployed
- Make work pay

- c) Fostering employment demand by labour market deregulation
- Deregulation of the temporary work sector
- Exemptions from restricitons on fix-term contracts
- Exemptions from restrictions on dismissal protection

To this end, the reform modified many of the already existing measures of active labour market policy and introduced a set of new measures (cf. Fertig and Kluve 2004 for an overview). It fundamentally changed the general framework in which these measures operate and involved greater co-ordination of institutional arrangements, especially between active

⁴ The federal employment office presented palliated figures on the quantity of unemployed workers who the federal employment office claimed to have re-integrated into the labour market.

⁵ Named after the commission's director Peter Hartz, the personnel director of Volkswagen at the time.

⁶ The federal employment agency translates "Fördern und Fordern" as "Challenge and Promotion".

and passive policy measures. Deregulating measures concentrated on the temporary work sector, while the biggest changes entailed by the reform took place in the realm of job placement services and the benefit system.

3a. Increasing effectiveness and efficiency of services and measures

The reform aimed to improve the performance of placement services and policy programmes mainly by introducing market mechanisms to the realm of placement services and by streamlining public employment services. Furthermore, cost-effectiveness in the specific context of each regional labour market is targeted to be the key criteria when choosing programme contents and participants.

First, regarding their *organisational structure*, the public employment services were modernised along the lines of New Public Management. The reform established results-based accountability and controlling of local employment agencies. Now, each employment agency has to fulfil quantitative goals which are individually fitted to each type of agency, while at the same time having a wider scope of discretion on the choice of policy mix. The formerly hierarchically organised employment offices were converted into costumer-orientated one-stop-centres. The range of services provided by the jobcentres has been extended, ranging from advising and counselling services to social services and administration of benefit payments. The caseload of caseworkers is targeted to be reduced and every jobseeker is assigned to a fixed caseworker.

A second aspect regards *quasi markets*: The introduction of market forces is expected to improve the quality of services and to break up the informal and often inefficient insider relationships between public employment management and private providers. The reform introduced, for instance, voucher systems for placement services and training measures. Each individual whom the public employment service was unable to place after six weeks of unemployment can choose an alternative private placement service. The private service receives a lump sum payment after having placed the jobseeker successfully. Providers of training measures, too, can be chosen freely by the client and paid for with a voucher.

The public employment service can choose to *outsource services* fully or partly, most importantly placement services. Public tendering became compulsory for external contracts. One example is the placement via temporary work: Since 2003, every local employment office sets up a "Staff Service Agency" (Personal Service Agentur, PSA) that acts like a temporary work agency for the unemployed. To this end, the local employment office either may contract a private temporary work agency or, if no provider is available, may run a PSA

by itself. The local employment office may delegate hard-to-place clients to the PSA, which in turn receives a lump sum fee for each worker. The PSA may lend the worker temporarily to other firms or provide a permanent placement. During periods of inactivity, the PSA should provide training measures to the worker. Therefore, PSAs encompass aspects of both training measures and job search assistance.

Third, the reform aims at improving the targeting of active measures and the allocation of measures and resources. To this end, statutory regulation of eligibility conditions is reduced, now leaving a wider scope for individually fitting clients to measures. Assignment of clients to measures is now based on a profiling process, which is highly standardised. The caseworker will assess the client's abilities, problems, and potential labour market chances in an interview and thereafter assign the client to one out of four types: "Market clients" (Marktkunden) are considered to have the highest chances of finding employment, "Clients for counselling and activation" (Beratungskunden Aktivieren) range second and mainly need to be activated in their job search. "Clients for counselling and support" (Beratungskunden Fördern) need more attention and will likely be assigned to a programme, while "Clients in need of supervision" (Betreuungskunden) need special attention since they face the lowest chances of re-employment. Each type is linked to an action programme, defining the available measures for that type of jobseeker. Active labour market policy measures are available mainly for the types II "counselling and activating" and III "counselling and supporting". The type I "market client" is expected to re-integrate without special assistance, while the fourth type, "supervising", is deemed not benefiting from any measure and excluded from participation.

Many active policy measures were re-designed in terms of their target population. For example, since the reform, selection into training measures deliberately targets cream skimming in order to choose those clients who will benefit most from training. Only those clients will be admitted who are conjectured to have a 70% probability of finding a job after the measure. Accordingly, training providers have to produce a 70% success rate of respective participants in order to be contracted by the employment agency. In contrast, job creation measures are re-designed for merely targeting the very hard-to-place unemployed. That means public employment shall constitute market replacement and thereby preserve employability for those who are not expected to find a way back into regular employment in the near future. Incentives for unemployed workers to take up public employment rather than regular employment were reduced as participants can no longer restore eligibility for unemployment benefits after completing the measure. The restrictive targeting of training and job creation

schemes as well as the reduction of programme durations induced a further reduction of participants and spending for these measures. On average, participation in training will take place at an earlier stage in the unemployment spell.

Last but not least, the need for *rigorous scientific evaluation of programme effectiveness*, in order to be able to continuously optimise existing programmes on the basis of conclusive empirical evidence, was recognized by policy makers, and a corresponding evaluation mandate was implemented with the Hartz reforms. Hence, the Hartz reforms constitute the first major reform in the history of the German welfare state that is accompanied by a comprehensive scientific evaluation on behalf of the government. The process started with two competing pilot studies developing a conceptual framework for the evaluation (Fertig et al. 2004, Hagen and Spermann 2004) and subsequently was put out to tender. Currently more than 20 economic and sociological research institutes with about 100 researchers are involved in the evaluation (cf. Bundesregierung 2006 for details of the set-up).

3b. Activation of jobseekers

The principle of "rights and duties" is the core element of the Hartz reforms. The activation strategy is implemented in virtually every element of the labour market policy framework, e.g. in the *benefit system:* Whereas before the reform previous social security contribution was the key criteria for benefit access, now the access to benefits and active labour market participation is strictly conditional on a person's ability to work. This is defined as being able to work at least 15 hours a week. Those capable of working are assigned to the employment agencies and will be subject to activation policies on the basis of the principle of "rights and duties". An unemployed person receives a so-called benefit type I for the first 6 to 12 months of unemployment. Thereafter, the person receives a lump sum means-tested benefit type II. Persons who never made contribution payments but who are deemed capable of working will receive the benefit type II right from the beginning. The benefit type II is not earnings-based, as the unemployment assistance benefit had been in the previous system, and is less generous than social assistance. Only those who are not capable of working due to sickness, disability or care responsibilities receive means-tested social assistance from the local authorities and are exempted from "duties".

The reform also introduced *sanction* elements, i.e. additional means to effectively monitor the jobseeker's job search activities and personal efforts to re-integrate into the labour market. The jobseeker is obliged to accept any offer of suitable work. The definition of suitable work was broadened, e.g. including the obligation to move to a different city under

certain circumstances. Benefit receipt is strictly conditional on the availability for work and the availability for programme participation. The individual action plan that results from the profiling process is set out in a binding integration agreement (*Eingliederungsvereinbarung*). This written agreement states both the services that will be provided to the job seeker as well as the job seeker's obligation regarding job search activities and programme participation, where required. An unemployed individual will be threatened by sanctions if he or she deviates from the integration agreement or does not cooperate appropriately. Though possible in principle, sanctions in the form of temporary benefit reductions are rarely applied in practice, since they used to provoke costly lawsuits with benefit claimants. A person's availability can additionally be tested by training or by workfare measures in the public sector (the so-called *1-EURO-Jobs*) or assignment to PSA.

The *new policy mix* is more strongly orientated towards measures for jobseekers who proactively seek to improve their situation in a self-responsible way. There is more emphasis on measures that promote the direct integration into the labour market as opposed to training measures and public job creation schemes that keep participants out of the market for the duration of the programme. Active measures that best represent the new activation strategy are start-up subsidies. These are a relatively new component of German active labour market policy. Though a so-called "bridging allowance" (Überbrückungsgeld) was introduced already in 1986, the number of participants has increased only recently. The benefit is paid for 6 months and is equal to the unemployment benefit that the recipient had previously received or could have received plus a lump-sum social security contribution. In order to receive the grant, the chamber of commerce has to approve the business plan. The reform introduced an alternative subsidy, the so-called *Ich-AG* (i.e. "Me, Inc.", or, as *The Economist* (Feb 2006) translates, "Me-company") subsidy, which is independent of prior social security contributions. It is paid for a maximum period of three years as long as the claimant's income does not exceed 25,000 EUR per year. It amounts to 600 EUR per month in the first year, 360 EUR per month in the second and 240 EUR per month in the third year.

Furthermore, the integration into paid employment may be supported by several forms of wage subsidies which are paid to employers when hiring a certain type of hard-to-place worker. The idea is to compensate the firm for the presumably lower productivity of this type of worker. The Hartz reforms simplified eligibility conditions of so-called integration subsidies in order to facility the access to wage subsidies, giving priority to older and disabled workers. Generally, maximum duration varies between 6 and 24 months, depending on the target group and, as a rule, the maximum rate of subsidy should not exceed 50% of the

calculable remuneration. In order to avoid substitution effects and free riding, payments are not available when the employer apparently dismissed a worker in order to receive the benefit or when he had already employed the respective worker within the previous four years. Furthermore, the Hartz reform introduced social security subsidies for employers who employ an older worker. A firm who employs a worker of age 55 or older is exempt from contribution to the unemployment security system for this worker. However, the contribution amounts to only 3.25% of the gross wage.

Finally, various reform elements intend to *make work pay*, aiming at increasing work incentives to the unemployed. The reform did not reduce the very high marginal taxes on people who move from unemployment to employment. Rather, new forms of wage subsidies were introduced and already existing ones were modified or extended. The start-up subsidies mentioned above is one example. Furthermore, the reform introduced incentives to workers aged 50 and older to take up employment even when it pays less than previous employment. In these cases, elderly workers may receive a wage subsidy, the so-called wage protection, when they accept a job offer that pays less than their previous job. The wage subsidy amounts to 50% of the difference between the previous wage and the actual wage. It is paid for the same duration as the unemployment benefit would have been paid for if the person had remained unemployed.

Before the reform, policy makers had already tried out different forms of wage subsidies for low income earners (e.g. "Mainzer Modell"). The Hartz reform finally implemented a variant of previous models, the so-called "Minijobs" and "Midijobs". These schemes are generally applicable, i.e. they are not confined to the unemployed. A Minijob is a job generating an income below 400 EUR per month. A person holding a Minijob is exempt from social security contributions, which effectively increases net wages. Jobs with incomes between 400 and 800 EUR are called Midijobs. For these jobs, social security subsidies are paid at a decreasing rate, depending on the income, i.e. gradually fading from zero contributions at 400 EUR into full contributions at 800 EUR. Both Mini- and Midijobs thus constitute "jobs with reduced social security contributions".

3c. Labour market deregulation

Deregulation of labour market institutions took place regarding temporary work, dismissal protection and the regulation of fixed-term contracts. The wage setting process, on the other hand, remains highly centralised.

Regarding temporary work regulations, the reform intended to facilitate the expansion of the already booming sector of temporary work significantly. Temporary work agencies were legalised in 1967 and formally regulated in 1972. Since then, temporary work had been regulated rather restrictively for many years, and had been forbidden completely in the construction industry. Since the late 1990s, the law has been gradually liberalised. The Hartz reform finally abolished restrictions on synchronisation, re-assignment, fixed-term contracts and the maximum duration of temporary employment. A new rule was introduced requiring that a temporary work agency must either guarantee equal pay and equal treatment of temporary workers and regular workers or join a collective bargaining agreement between trade unions and employers. Temporary work is now also allowed in the construction industry, provided that a collective bargaining agreement applies. So far, however, no such contract has been agreed upon. As already mentioned, the law introduced a public sponsored Staff Service Agencies as a new form of placement-orientated temporary work for hard-to-place persons.

With respect to *dismissal regulations* and *fixed-term contract regulations*, the reform did not deregulate standard employment relations in a general way. Rather, it simplified and widened the number of cases for which exemptions from the generally rather restrictive regulations apply. Before the reform, for instance, exemptions from restrictions on fixed-term contracts were given for employees aged 58 and over. For these employees, fixed-term contracts could be renewed repeatedly without justification. The reform reduced the minimum age for which this regulation applies to 52 years. Furthermore, exemptions from dismissal protection, which before the reform were conceded to small firms with 5 employees or less, will now include firms with up to 10 employees.

4. Labour market policy effectiveness before and after Hartz

For a long time the evaluation of German ALMP had suffered from the lack of suitable data. Only very recently good quality data has become relatively widely available to researchers. Early studies on ALMP effectiveness were usually based on the GSOEP (German SocioEconomic Panel) or, for East Germany, the Labour Market Monitor East. The main drawback of these data is that, due to rather small overall sample sizes and panel mortality, they contain only few observations on participants of active labour market measures. Researchers often had to group together heterogeneous measures and some programmes could not be evaluated at all because participation was not documented in the data.

It was only at the end of the 1990s that the government started to acknowledge the need for a thorough evaluation of active labour market policies, and, in the following years, considerable effort was made to derive large data sets from administrative data on the local employment agency level (Bender et al. 2005). These data provide a large number of observations and cover rather long time periods. They therefore allow detecting short- as well as long-term effects and provide enough information to better distinguish different types of treatment and to analyse the optimal timing of events. These merged administrative data have become available to researchers recently and seem to be able to provide robust results. Most of the evaluation studies of the Hartz reforms make use of this type of data.

Early evaluation studies mainly concentrate on training and job creation schemes, which for a long time were the most important measures in terms of expenditure and number of participants (recall Figure 1). Fitzenberger and Speckesser (2000) provide a survey on early evaluation studies in Germany, most of which are based on the above-mentioned rather poor data. Caliendo and Steiner (2005), who update that review, and Wunsch (2005), who discusses the development of the German labour market since unification, include recent *pre-Hartz* studies based on the new and better data. The *post-Hartz* studies we discuss in the following sub-sections result from the evaluations of the Hartz laws I-III. The evaluation of Hartz IV, which basically comprises the reform of the benefit system and introduction of benefit type II combining unemployment and social assistance, will only begin in autumn of 2006.

4a. Increasing effectiveness and efficiency of labour market services and policy measures

Major policy changes aiming at improving effectiveness and efficiency of already existing measures took place in the realm of placement services, training and job creation schemes. In the following, we will discuss findings from evaluation studies of these measures before and after the reform. Other active policy measures that were re-designed under the reform are discussed in the next section.

4a1. Placement services

There are only two studies on the effectiveness of placement services before the reform. The DEA-based benchmarking study by Mosley et al. (2003) compares the relative efficiency in terms of activity (number of placements and programme entrants in relation to staff inputs) and effectiveness (transitions into regular employment) of West German local employment offices. The analysis is complemented with case studies of eight employment offices. The

results indicate strong differences in relative efficiency. The authors find that exogenous and endogenous factors each explain roughly 50% of variation in efficiency, respectively. They suggest that average efficiency of labour market offices could be increased by 19%. Hujer et al. (2005) study the effects of two pilot measures of job search assistance ("Stellenmarktoffensive") in 2001-2002 in the West German federal state of Hessen. The regional employment agency published a magazine for employers containing "employment wanted" advertisements among other things. The study finds positive effects of this measure, especially for women. Furthermore, the employment agencies offered courses on job search activities that advise on writing application letters, CVs, participating in job interview etc. Although effects vary across groups, in the general picture these measures do not produce positive results.

The Hartz-reform converted the former employment offices into costumer-orientated one-stop-centres. These are assessed in the study by WZB and infas (2005) using a conditional Difference-in-Differences-analysis that exploits the fact that one-stop-centres have been introduced at different points in time. Ten employment service agencies that have already transformed into one-stop-centres are matched to ten agencies that have not. Data is used from the inflow into unemployment of the respective agencies. The results indicate positive effects of one-stop-centres on the integration into regular employment, though the effects are not significant. This might be due to the fact that the number of agencies used in the analysis is small and the observation period at the present time is a maximum of nine months. The effects are more positive in East Germany, where labour market conditions are worse, and seem to work better for men than for women.

Furthermore, the report studies the outsourcing of placement services by comparing clients who have made use of external placement services to clients who have remained under the public employment service. External placement services can be utilised either by the client himself, using a placement voucher, or by the public employment service who can assign clients to external providers. Selection is controlled for by performing a combination of exact matching with propensity score matching. The analysis is based on administrative data which is supplemented by survey data from telephone interviews for a sub-sample. For placement vouchers, the results fail to find any significant effect on the prospect of entering employment. It appears that many clients who had received placement vouchers did not actually use them. In East Germany, those who found a job using a placement voucher remain in employment for a significantly shorter period than those who did not use placement vouchers. The assignment of clients to private placement providers by the public employment

service also does not show significant effects. Finally, the assignment to PSA produces significant locking-in effects that delay the integration of workers into regular, non-PSA employment.

4a2. Training measures

Training measures have been evaluated by numerous studies. Since studies mostly focus on either East or West Germany, we will present results for each region separately. Early evaluation studies on training in *East Germany* include Lechner (1998, 1999), Hujer and Wellner (2000), and Lechner (2000), which are based on the GSOEP. Studies based on the Labour Market Monitor East include Hübler (1997) and Fitzenberger and Prey (1998). Bergemann et al. (2000) use the Labour Market Monitor East of the federal state Saxony-Anhalt, as do Bergemann et al. (2004). Reinowski et al. (2003, 2004) use the Mikrozensus Saxony. Recent studies based on merged administrative data are Hujer, Thomsen and Zeiss (2004), Fitzenberger and Speckesser (2005) and Lechner et al. (2005).

Many of the early studies either find positive effects or are unable to find any significant effects of training programmes in *East Germany*. An exception is Hübler (1997) who finds negative effects for women. This result contrasts with the finding of Bergemann et al. (2000) of significantly positive effects of second treatments for women only. Bergemann et al. (2004) find positive effects in the early 1990s and negative effects in later years. In general, studies published from 2000 onwards tend to be more pessimistic. Besides Bergemann et al. (2004), also Lechner (2000) and Reinowski et al. (2003) find negative effects of training participation. By and large, the results are mixed and it is rather unclear what lesson can be drawn from these studies on the programmes' effectiveness.

Recent studies based on better administrative data seem to derive more consistent results. Hujer, Thomsen and Zeiss (2004) use data from the period 1999-2002 and Fitzenberger and Speckesser (2005) cover the period 1993-1997. The most comprehensive study is the one by Lechner et al. (2005) who use data covering the period of 1993 to 2002. Due to the richness of the data, various types of training programmes can be distinguished. Fitzenberger and Speckesser (2005) concentrate on "provision of specific professional skills" which is a special type of further vocational training programmes. Lechner et al. (2005) distinguish short training (up to 6 months), long training (over 6 months), retraining, and training in practice firms.

All studies based on the new data find significant evidence of locking-in effects for virtually all types of training programmes, i.e. the labour market performance is worse for participants compared to non-participants during and shortly after participation. The central question is whether there are positive effects in the medium and long run that are big enough to be able to compensate these negative short run effects. The answer seems to depend on the outcome variable. For unemployment duration, Hujer, Thomsen and Zeiss (2004) do not find significant long term effects of short and medium training programmes but find negative effects of long programmes, which means they increase unemployment duration (here, a participating person is considered unemployed). This contrasts with the other studies, Fitzenberger and Speckesser (2005) and Lechner et al. (2005), who take the employment rate as outcome measure and find positive effects in the long run for programmes that provide specific professional skills (Fitzenberger and Speckesser 2005) as well as for short training and retraining programmes (Lechner et al. 2005). Lechner et al. (2005) also use monthly earnings as an outcome variable and again find positive effects in the long run.

Early studies on training in *West Germany* include Pannenberg (1995), Hujer et al. (1998) and Hujer and Wellner (2000). These studies use models of unemployment duration and are based on GSOEP data covering the second half of the 1980s and the early 1990s. Again, results are mixed: Pannenberg (1995) and Hujer et al. (1998) do not find significant positive effects, while Hujer and Wellner (2000) find positive effects, however, for short term programmes only. More recent studies based on administrative data are Klose and Bender (2000), Lechner et al. (2004) and Fitzenberger and Speckesser (2005). Klose and Bender (2000) use a preliminary version of the data. Fitzenberger and Speckesser (2005) use the final data covering the period 1993-1997, while Lechner et al. (2004) base their study on data covering the larger period of 1993 to 2002.

Klose and Bender (2000) do not find any positive effects, which might be due to the preliminary character of their data. In contrast, Lechner et al. (2004) as well as Fitzenberger and Speckesser (2005) come to quite optimistic results. Fitzenberger and Speckesser (2005) find negative locking-in effects on the employment rate in the short run and significantly positive effects in the long run for training programmes providing specific professional skills. The findings of Lechner et al. (2004) suggest that short and long training have positive effects on employment rates in the short run. In the long run short training and retraining show positive results. Furthermore, they find significantly positive effects on monthly earnings for short and long training.

As delineated in section 3, the reform changed the usage and set up of training in various aspects. First, positive effects might be expected from the reduction of participants and deliberate cream skimming as part of the selection process. Second, the duration of

programmes has been reduced and participation will take place, on average, at an earlier stage in the unemployment spell. Third, course quality is expected to improve by increased competition between providers and the priority of efficiency criteria.

The study evaluating training measures *post-Hartz* was conducted by IZA, DIW and infas (2005) and uses administrative data and survey data to compare the effect of training measures before the reform in the period 2000 to 2003 with effects after the reform in the period 2003 to 2005. The results confirm the previous results of severe locking-in effects. They suggest that the positive results in the medium and long run are based on the positive employment effect on persons who otherwise would have drifted into non-participation. Furthermore, effects of pre-reform measures seem to be less positive when taking employment stability into account. As expected, the results indicate that the reform succeeded in significantly reducing locking in effects, though evidence on long-term effects of the modified training measures are not yet available at the time being. The cost-effectiveness of measures before the reform was negative. By reducing course durations and better targeting, the reform was able to reduce the gap between costs and benefits, though the balance is still negative.

4a3. Job Creation Schemes

For a long time, job creation schemes could be evaluated only for East Germany because data sources that provide information on participation in job creation schemes were limited to East Germany only. These are the Labour Market Monitor East which is used by Hübler (1997), the Labour Market Monitor of the federal state Saxony-Anhalt, which is used by Bergemann et al. (2000), Eichler and Lechner (2002) and Bergemann (2005), and the Mikrozensus Saxony used by Reinowski et al. (2003).

None of the studies finds positive effects on the employment rate, apart from Eichler and Lechner (2002) who find positive employment effects, although for men only. Reinowski et al. (2003) use the hazard rate of transition from unemployment to employment as a dependent variable, where unemployment spells include periods of participation. They do not find positive effects of programme participation. Bergemann (2005) finds that for women participation significantly increases the reemployment probability. Furthermore, she reports significantly positive effects on men's and women's probability to remain employed. Caliendo et al. (2003) use the recently derived administrative data for the years 2000-2002, which provides information on programme effects in West Germany for the first time. Their results are pessimistic, revealing negative mean employment effects. Positive employment

effects are limited to few socio-demographic groups, namely women over 50, long-term unemployed and hard-to-place women in West Germany as well as female long-term unemployed in East Germany. However, since the observation period is rather short, the negative effects might represent locking-in effects similar to the ones found for training programmes.

The evaluation study by SÖSTRA, Compass, IMU, PIW (2005) provides new evidence for the period 2000 – 2004. At the time being, results on job creation schemes after Hartz are still preliminary. The authors use administrative data of persons who entered job creation measures in April of the years 2000 to 2004. Control groups are constructed using matching methods. The programme effect on the probability to leave unemployment is assessed by comparing the survival functions of treated and non-treated groups, where unemployment spells include the time spent in unemployment before participation started. The study confirms the generally negative effects of participation in job creation measures for time periods before Hartz, though effects seem to be positive in the long-run in West Germany. The results suggest that the detrimental effects of job creation measures regarding unemployment duration are entirely caused by the locking-in of participants, while stigma effects do not seem to play a role. Regarding effects of the Hartz reforms, the study finds negative treatment effects for the post-reform period, too, although the magnitude of the effects seems to have decreased. Since 2004 it has been a lawful objective of job creation schemes to generate or preserve "employability" of participants, rather than actual employment only. As yet the evidence on impacts of job creation measures on employability is inconclusive.

4b. Activating the unemployed

The Hartz reform shifts priority towards active measures that require proactive behaviour of the unemployed and promote their direct integration into regular employment (cf. section 3b). To this end, the reform re-designed integration subsidies, introduced new forms of wage subsidies, start-up subsidies and jobs with reduced social security contributions. In the following section we review evaluation studies of such measures before the reform, if applicable, and subsequently focus on the novel evidence post-reform.

4b1. Wage subsidies to employers

The challenge of controlling adequately for self selection is especially difficult in the context of integration subsidies. Here, selection into treatment does not only depend on the

characteristics of the participant, but also on characteristics of the potential employer who will receive the subsidy. The case worker, moreover, has a wide scope of discretion for determining whether the characteristics of employer and employee jointly satisfy the criteria required for the subsidy. There are only two studies on the effects of integration subsidies before Hartz. Jaenichen (2002) collects administrative data from selected Federal Employment Agency districts throughout Germany covering the period 1999-2001. She finds that participating in integration subsidy programmes significantly reduces the probability of a worker to be registered as unemployed. In the long run, when the subsidy usually expired, the effect is still positive, although significant only in East Germany. Hujer, Caliendo and Radi (2004) use firm data to examine whether employing subsidized workers affects the employment development of firms. Based on the IAB establishment panel data covering the years 1995-1999 they cannot find any significant effects.

The Hartz reform provided the opportunity to circumvent the selection problems that have been outlined above, by changing the eligibility conditions for integration subsidies. The study by ZEW, IAB and IAT (2005) uses administrative data of the years 2000 to 2003 and exploits the fact that since the beginning of 2002 older unemployed workers do no longer need to satisfy the condition of being long-term unemployed in order to be eligible for integration subsidies. The effect of wage subsidies on the employment prospects of older workers is assessed using a Difference-in-Differences estimator. The results indicate that integration subsidies increase the probability to be employed 6 months after entering unemployment by 2 percentage points. These effects seem to stem from significant positive effects in East Germany only, while in West Germany the effects are insignificant. Within the target group the number of windfall beneficiaries seems to be low. The longer term effects of integration subsidies on the probability of being employed after the subsidy ends is assessed using propensity score matching. The results suggest that, depending on type, length and target group of the subsidy, this probability is 20 to 50 percentage points higher for the treatment than the for the comparison group. However, there are some indications of windfall gains.

4b2. Start-up subsidies

Only little empirical evidence exists on the effectiveness of the "bridging allowance" start-up subsidy for the unemployed. The study by Pfeiffer and Reize (2000) compares firm survival and employment growth of start-ups by unemployed persons receiving bridging allowance and other, regular start-ups, based on firm data from 15 regions in East and West Germany.

The results indicate that the survival rate and employment effects of subsidised start-ups do not differ from unsubsidised start-ups. The Hartz evaluation study by IAB, DIW, Sinus, GfA, and infas (2005) also provides results on the effectiveness of the bridging allowance before the reform. The analysis is based on administrative data of cohorts entering unemployment in 2000 which are observed until 2002. The effectiveness of start-up subsidies is assessed using matching methods. The authors suspect, however, that some selection bias might remain due to unobservable characteristics of unemployed who decide to start-up a business. The results show that 6 months after the bridging allowance expires the effect is still significantly positive on a high level, especially for women. For the period after the reform, the data is complemented with survey data for the treatment and control group. The study confirms the positive results of bridging allowance after the reform.

For the second, new type of start-up subsidy, the so-called "Ich-AG" or "Me, Inc." subsidy, most participants are still receiving the subsidy at the end of the observation period. Information on effects after eligibility expires is therefore not available yet. However, the subsidy, which gradually diminishes, is generally very low at the end of the observation period. Therefore, the significantly positive effects that can be observed at that stage might be expected to persist further as well. At the same time the study reports indications of windfall gains as a substantial number of start-up subsidy recipients report that they would have started a business also without the subsidy. These figures amount to around 25-60% for bridging allowance recipients, and to 60-70% of individuals in the "Me, Inc." scheme. Even for these businesses, however, the subsidy might still have exerted a positive effect *during* the first months in business, rather than on business creation *per se*.

4b3. Wage protection for older workers

Wage protection is a wage subsidy for workers aged 50 and older who take up employment in a job that pays less than the previous job. The effect of the subsidy on the employment prospects of older workers is studied by ZEW, IAB and IAT (2005). The analysis employs a difference-in-differences estimator using administrative data from the years 2002 and 2003, where workers aged 50 or 51 are the treatment group and workers aged 48 or 49 are the control group. The results indicate a positive though insignificant effect of the subsidy. The authors suggest that the insignificance might be due to low take-up of wage protection.

4b4. Employment with reduced social security contributions (Mini-/Midijob)

Various reform elements, including the introduction of Mini-/Midijobs, are evaluated in terms of their impact on the general structure of employment. These studies are part of the report by RWI et al. (2005). The introduction of jobs with reduced social security contributions for the income range between 400 and 800 EUR (Midijobs), and the reform of marginal employment waiving social security contributions for incomes below 400 EUR (Minijobs) is expected to increase the number of persons working in these earnings segments. The introduction of Miniand Midijobs constitutes a "universal treatment", i.e. everybody in the labour market is affected, and no comparison group without treatment exists. Its effects are examined by first estimating the individual probability of each worker to be employed in the respective earning segment before the reform, using a fixed-effects linear probability model. Then, assuming that structural parameters would have remained identical without the reform, the counterfactual probability of employment in these segments is estimated on the basis of post-reform data utilizing the estimated pre-reform parameters. The reform effect is then given by the difference between the estimated post-reform probabilities using pre-reform coefficients and the actual post-reform probabilities.

The results show that the introduction of reduced social security subsidies for Midijobs caused a significant increase of about 125,000 in the number of employees in this income range, while the Minijob reform caused a huge expansion of employment in this earnings segment (+ 1.8 million Minijobs due to the reform). However, incidence of intra-enterprise displacement of regular jobs cannot be ruled out. Moreover, employees who benefit from the regulations have rarely been previously unemployed, in spite of hopes associated with this policy that especially unemployed individuals would increasingly take on Mini- and Midijobs. This might be due to the fact that the marginal tax on people who move from unemployment to employment is still very high.

4c. Labour market deregulation

As is the case for the evaluation of the Minijobs and Midijobs reforms, deregulation policies regarding temporary work and fixed-term contracts are evaluated with respect to the general employment structure. The exemption of small firms from dismissal protection regulation, however, was not subject to an evaluation.

4c1. Deregulation of temporary work

The reform of temporary work regulations is evaluated in the report by RWI et al. (2005) applying the same methodology for universal treatments as for the Mini-/Midijob evaluation outlined above. The results indicate that the reform significantly increased the number of employees in the temporary work sector in the two quarters after the reform. No data is available yet for longer periods.

4c2. Fixed-term contracts for the elderly

The effect of *old-age workers being exempt from restrictions on fixed-term contracts* is assessed by RWI et al. (2005) using a Difference-in-Difference estimator. Workers just above the minimum age for exemption (52 to 53 years) constitute the treatment group, while workers just below this age (50-51 years) are the control group. The exemption of old workers above 52 years of age from restrictions on fixed-term contracts is expected to increase the number of old workers holding fixed-term contracts. The analysis does not reveal any significant treatment effects. This might be due, however, to the short observation period, since currently data are available for only three months after the exemption was introduced.

4d. Summary of policy effectiveness before and after Hartz

Table 2 presents an overview of the effectiveness of various policy measures before and after Hartz. The table follows the previous structure of section 4 (also used in section 3) in distinguishing between reform elements that aim at a) increasing effectiveness and efficiency of labour market services and policy measures, b) activating the unemployed, and c) deregulating the labour market. The second column summarises the estimated effects of the respective policy arising from the available set of evaluation studies conducted before Hartz. Obviously, for several policies, such as the newly introduced placement vouchers, such an assessment is not applicable. The third column summarises the results obtained for each measure in the comprehensive evaluation on the effectiveness of the Hartz reforms (cf. also Bundesregierung 2006 and Kaltenborn et al. 2006). Column 4 then intends to assess the "before-after difference", which – with explicit caution – could be interpreted as a "reform effect" of the measure. The caution results from the fact that, whereas the before-after difference may indeed be caused by the redesign of the measure, it is also conceivable that the overall change in the institutional framework of the labour and placement markets is responsible for differentially effective policies pre- and post-Hartz. Also, some evaluation studies before Hartz are quite distinct in their specific focus from those conducted after Hartz e.g. the studies concerning general placement services – and hence not directly comparable.
 Another caveat when interpreting the results is the fact that the post-reform observation period is short-term only.

Table 2. Effects of the Hartz reforms

Measure	Evidence before	Evidence after	Reform effect
4a1. Placement Services			
General	(+)	(+)	(+) Introduction of one-stop-centres seems positive, but significance of effects unclear.
Placement voucher ^a	n/a	0	0 No significant effect on re-employment probability.
Assignment to private placement providers ^a	n/a	0	0 No significant effect on re-employment probability.
Placement via temporary work (PSA)	n/a	-	 PSA reduce the employment probability of participants.
4a2. Training	0 older studies / (+) more recent studies	+	+ Exit rate to employment increased, locking-in effects reduced.
4a3. Public job creation	_	(-)	 Measure remains detrimental after the reform. (+) Magnitude of negative effect decreases. Impact on "employability" unclear.
4b1. Wage subsidies to employers (Integration subsidies)	(+)	+	+ 20-50 percentage points higher probability of regular employment post-treatment. Extent of windfall gains unclear.
4b2. Start-up subsidies (Bridging allowance and "Me, Inc.")	(+) ^b	+	+ Subsidy significantly reduces risk of unemployment (decreasing over time). Some windfall beneficiaries exist.
4b3. Wage protection for elderly 4b4. Employment with reduced	n/a	0	0 No significant effect.
social security contributions Minijobs	n/a	+	+ Reform caused large increase in employees in Minijobs (+1.8 Mio.). (–) Inflow from unemployment low. Incidence of intraenterprise displacement cannot be ruled out.
Midijobs	n/a	(+)	(+) Modest effect on creation of Midijobs (+125,000). Incidence of intra-enterprise displacement cannot be ruled out.
4c1. Temporary work deregulation	n/a	+	+ 23,700 additional employees in temporary work 6 months after reform (short-term). Deregulation widely acclaimed.
4c2. Fixed-term contracts for elderly	n/a	0	0 No significant effect.

Notes: Labour market effects: + positive, (+) modestly positive, 0 zero, (-) modestly negative, - negative.

The table summarizes the results discussed in more detail in the previous subsections. Training and public job creation schemes, which were both already used and evaluated

^a Already since early 2002.

^b Pre-reform evidence on bridging allowance only.

extensively before the reform, appear to be improved. The "improvement" of public job creation schemes, however, unfortunately merely implies the fact that since the reform they appear less detrimental for participants' employment prospects than before. For another redesigned measure, wage subsidies, the reform provided the first opportunity to consistently evaluate its effects and thus to reveal its apparently high effectiveness.

Several new measures – placement voucher, assignment to private placement providers, fixed-term contracts for the elderly – do not display significant effects, which may be due to *de facto* ineffective or small-scale policies, or perhaps due to the fact that the post-reform observation period is not yet long enough. While placement via temporary work (PSA) shows negative treatment effects, the new start-up subsidy significantly reduces the risk of unemployment. Both the deregulation of the temporary work sector and the introduction and reform, respectively, of jobs with reduced social security contributions (Midijobs and Minijobs) appear to have created additional employment opportunities in the respective labour market segments. However, intra-enterprise displacement effects cannot be ruled out. The general redesign of the public employment services appears promising.

On balance, we therefore find that the Hartz reforms in their entirety seem to have contributed to a better functioning of the German labour market and the effectiveness of specific active labour market policies. This positive assessment, however, has to be qualified somewhat in light of the fact that the starting point upon which the reforms intended to improve had been quite dismal.

5. Conclusion

In this paper we have pictured the features of German labour market policy and delineated the rationale for the Hartz reforms implemented in the years 2003-2005. We have described the main underlying principles and the corresponding policy changes. Thereafter we have surveyed the existing evidence on the effects of active labour market policy before and after the reforms.

German ALMP before Hartz was dominated by training and public job creation measures. These measures were characterised by a long duration compared to other countries. Especially in East Germany the extensive use of job creation measures created a sheltered labour market of substantial magnitude. In contrast, measures directly supporting integration into regular employment (e.g. wage subsidies and start-up subsidies) were introduced relatively recently and played a minor role before. Assignment to programmes was not based

on a systematic profiling of costumers. Generally, job search assistance and monitoring by the public employment agency was given rather low priority. It was argued that the main weaknesses of the former labour market policy in Germany were, firstly, public employment services operating inefficiently, and secondly, the fact that the interplay of active policy measures with the generous benefit system created adverse work incentives that retained the unemployed in passivity rather than stimulating them to integrate into the regular labour market.

The Hartz reforms aimed at improving employment services and policy measures, and activating the unemployed. Public employment services were modernised along the lines of New Public Management. This includes results-based accountability of local employment agencies, outsourcing of many services and open competition between private service providers. The former employment offices were converted into costumer-orientated one-stopcentres, offering individual profiling, job search assistance, social services and administration of benefit payments. Furthermore, various policy changes implement an activation strategy according to the principles of "rights and duties". First, the entire benefit system was redesigned. Unemployment benefit levels and durations were reduced. Eligibility for subsistence allowances now differs according to a person's ability to work rather than previous contribution payments, as was the case before. Benefit recipients may also be subject to sanctions, mainly benefit reductions, if duties are not complied with. Second, priority is given to measures that support unemployed workers who are pro-actively seeking integration into regular employment, most importantly wage subsidies and start-up subsidies. Third, jobs with reduced social security contributions were introduced (Midijobs), and the regulation for jobs exempt from such contributions was reformed (Minijobs), both with the intention to provide higher incentives for individuals to take on employment in the low wage sector.

Results of evaluation studies of German active labour market policies have been rather inconsistent for many years. Probably this was due to a lack of appropriate data, or to the sensitivity of results with respect to different identification strategies. However, due to better data, advances in methodology and a higher consensus on identification strategies, recent evaluation studies seem to be able to provide more robust and consistent results. For the pre-Hartz period, it can be concluded e.g. that most training measures seem to show a considerable dynamic in programme effects, having negative (locking-in) effects in the short-run and a tendency towards positive employment effects in the long run. Based on such results, future cost-benefit analyses might be able to trade costs of negative short-run effects against benefits of positive long-run effects. Moreover, there is evidence that job creation

schemes perform badly on average in the short run, and actually bring about impaired employment prospects for participants. The (limited) evidence on wage subsidies and start-up subsidies *pre-Hartz* indicates modestly positive effects of such measures.

The comprehensive evaluation of the Hartz reforms, which involves more than 20 research institutions and a total of about 100 researchers, has produced rich evidence giving the general impression that the effectiveness of measures has modestly improved. The results, which are still preliminary at the time being, indicate that the re-organisation of public employment services was mainly successful, with the exception of the outsourcing of services. Re-designing training programmes seems to have improved their effectiveness, while job creation schemes continue to be detrimental. Policy measures such as the redesigned wage subsidies and start-up subsidies show significantly positive effects. Thus, the new strategy, with more emphasis on wage subsidies and start-up subsidies and less emphasis on training and public job creation schemes, seems to be a promising mix of active labour market policies, moving the German labour market in the right direction. It seems clear, however, considering the continuing crisis of the German economy, that further steps have to be taken.

References

- Bender, S., A. Bergemann, B. Fitzenberger, M. Lechner, R. Miquel, S. Speckesser and C. Wunsch (2005), Über die Wirksamkeit von FuU-Maßnahmen, Ein Evaluationsversuch mit prozessproduzierten Daten aus dem IAB, Nürnberg, *Beiträge zur Arbeitsmarkt-und Berufsforschung*.
- Bergemann, A. (2005), Do Job Creation Schemes Initiate Positive Dynamic Employment Effects?, *mimeo*, Department of Economics, Free University Amsterdam.
- Bergemann, A., B. Fitzenberger, B. Schultz and S. Speckesser (2000), Multiple Active Labour Market Policy Participation in East Germany: An Assessment of Outcomes, *Konjunkturpolitik*, Beiheft Nr. 1, S. 195-243
- Bergemann, A., B. Fitzenberger and S. Speckesser (2004), Evaluating the Dynamic Employment Effects of Training Programmes in East Germany Using Conditional Difference-in-Differences, ZEW DP No. 04-41
- Blien, U., E. Maierhofer, D. Vollkommer and K. Wolf (2003), Einflussfaktoren der Entwicklung ostdeutscher Regionen Theorie, Daten, Deskriptionen und quantitative Analysen, in: U. Blien (ed.), Die Entwicklung der ostdeutschen Regionen, *Beiträge zur Arbeitsmarkt- und Berufsforschung* 267, 67-254.
- Bundesregierung (2006), Die Wirksamkeit moderner Dienstleistungen am Arbeitsmarkt Bericht 2005 der Bundesregierung zur Wirkung der Umsetzung der Vorschläge der Kommission Moderne Dienstleistungen am Arbeitsmarkt (Ohne Grundsicherung für Arbeitssuchende), http://www.bmas.bund.de/BMAS/Redaktion/Pdf/hartz-evaluation-volltext,property=pdf,bereich=bmas,sprache=de,rwb=true.pdf (Feb 1st, 2006)
- Caliendo, M., R. Hujer and S.L. Thomsen (2003), The Employment Effects of Job Creation Schemes in Germany: A Microeconometric Evaluation, IZA DP No. 1512.
- Caliendo, M. and V. Steiner (2005), Aktive Arbeitsmarktpolitik in Deutschland:
 Bestandsaufnahme und Bewertung der mikroökonomischen Evaluationsergebnisse,
 DIW DP 515.
- Eichler, M. and M. Lechner (2002), An Evaluation of Public Employment Programs in the East German State of Sachsen-Anhalt, *Labour Economics* 9,143-186.
- Engels, D. (2001), Abstand zwischen Sozialhilfe und anderem Arbeitseinkommen: Neue Ergebnisse zu einer alten Kontroverse, *Sozialer Fortschritt* 3/2001.
- Fertig, M. and J. Kluve (2004), A conceptual framework for the evaluation of comprehensive labor market policy reforms in Germany, *Applied Economics Quarterly Supplement* 55, 83-112.
- Fertig, M., J. Kluve, C.M. Schmidt, H. Apel, W. Friedrich and H. Hägele (2004), Die Hartz-Gesetze zur Arbeitsmarktpolitik Ein umfassendes Evaluationskonzept, RWI-Schriften 74, Duncker & Humblot: Berlin.
- Fertig, M., C.M. Schmidt and H. Schneider (2006), Active Labour Market Policy in Germany Is There a Successful Strategy?, *Regional Science and Urban Economics*, forthcoming.
- Fitzenberger, B. und H. Prey (1998), Beschäftigungs- und Verdienstmöglichkeiten von Weiterbildungsteilnehmern im ostdeutschen Transformationsprozeß: Eine Methodenkritik, in Pfeiffer, F. and W. Pohlmeier (eds), Qualifikation, Weiterbildung und Arbeitsmarkterfolg, ZEW Wirtschaftsanalysen 31, Baden-Baden: Nomos.
- Fitzenberger, B. and S. Speckesser (2000), Zur wissenschaftlichen Evaluation der Aktiven Arbeitsmarktpolitik in Deutschland: Ein Überblick, *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung* 33, 357-370.
- Fitzenberger B. and S. Speckesser (2005), Employment Effects of the Provision of Specific Professional Skills and Techniques in Germany, *mimeo*, Department of Economics, Goethe-University, Frankfurt am Main

- Franz, W. (2001), Neues von der NAIRU?, *Jahrbücher für Nationalökonomie und Statistik*, 221, 256-284.
- Hagen, T. (2003), Three Approaches to the Evaluation of Active Labour Market Policy in East Germany Using Regional Data, ZEW DP No. 03-27.
- Hagen, T. und A. Spermann (2004), Hartz-Gesetze: Methodische Ansätze zu einer Evaluierung, ZEW Wirtschaftsanalysen 74, Nomos: Baden-Baden.
- Hübler, O. (1997), Evaluation beschäftigungspolitischer Maßnahmen in Ostdeutschland, *Jahrbücher für Nationalökonomie und Statistik* 216, 21-44.
- Hujer, R., Blien, U., Caliendo, M. and Zeiss, C. (2005), Macroeconometric Evaluation of Active Labour Market Policies in Germany A Dynamic Panel Approach Using Regional Data, forthcoming in: Carloeo, F.E., Destefanis, S. (eds.): Regions, Europe and the Labour Market. Recent Problems and Developments, Physica Verlag.
- Hujer, R., M. Caliendo and D. Radi (2004), Estimating the effects of wage subsidies on the labour demand in West Germany using the IAB establishment panel, MIKAS Mikroanalysen und amtliche Statistik, Wiesbaden: Statistisches Bundesamt, 249-283.
- Hujer, R., M. Caliendo and S. Thomsen (2005), Mikroökonometrische Evaluation des Integrationserfolges, in Schaade, P. (ed): Evaluation des hessischen Modells der Stellenmarktoffensive, *Beiträge zur Arbeitsmarkt- und Berufsforschung* 291, Nürnberg
- Hujer, R., K.Maurer and M. Wellner (1998), Kurz- und langfristige Effekte von Weiterbildungsmaßnahmen auf die Arbeitslosigkeitsdauer in Westdeutschland, in Pfeiffer, F. and W. Pohlmeier (eds), Qualifikation, Weiterbildung und Arbeitsmarkterfolg, *ZEW Wirtschaftsanalysen* 31, Baden-Baden: Nomos.
- Hujer, R., S. Thomsen and C. Zeiss (2004), The Effects of Vocational Training Programmes on the Duration of Unemployment in Germany, IZA DP No. 1117
- Hujer, R. and M. Wellner (2000), Berufliche Weiterbildung und individuelle Arbeitslosigkeitsdauer in West- und Ostdeutschland: Eine mikroökonometrische Analyse, *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung* 33, 405-420.
- IAB, DIW, sinus, GfA, infas (2005), Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission Modul 1e:Existenzgründungen, June. BMAS Forschungsbericht (Research report of the Federal Ministry for Labour and Social Affairs).
- IZA, DIW, infas (2005), Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission Modul 1b: Förderung beruflicher Weiterbildung und Transferleistungen, June. BMAS Forschungsbericht (Research report of the Federal Ministry for Labour and Social Affairs).
- Jaenichen, U. (2002), Lohnkostenzuschüsse und individuelle Arbeitslosigkeit. Analysen auf der Grundlage kombinierter Erhebungs- und Prozessdaten unter Anwendung von Prospensity Score Matching, *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung* 35, 327-351.
- Kaltenborn, B., P. Knerr und J. Schiwarov (2006), Hartz: Bilanz der Arbeitsmarkt- und Beschäftigungspolitik, *Blickpunkt Arbeit und Wirtschaft* 3/2006, Berlin.
- Klose, C. and S. Bender (2000), Berufliche Weiterbildung für Arbeitslose- Ein Weg zurück in Beschäftigung? Analyse einer Abgängerkohorte des Jahres 1986 aus Maßnahmen zur Fortbildung und Umschulung mit einer ergänzten IAB-Beschäftigungsstichprobe 1975-1990, Mitteilungen aus der Arbeitsmarkt- und Berufsforschung 24, 421-444
- Lechner, M. (1998), Training the East German Labour Force Microeconometric Evaluations of Continuous Vocational Training after Unification. Heidelberg: Physica-Verlag.
- Lechner, M. (1999), Earnings and Employment Effects of Continuous Off-the-Job Training in East Germany after Unification, *Journal of Business and Economic Statistics* 17, 74-90.

- Lechner, M. (2000), An Evaluation of Public Sector Sponsored Continuous Vocational Training Programmes in East Germany, *Journal of Human Resources* 35, 347-375.
- Lechner, M., R. Miquel and C. Wunsch (2004), Long-Run Effects of Public Sector Sponsored Training in West Germany, IZA DP No. 1443
- Lechner, M., R. Miquel and C. Wunsch (2005), The Curse and Blessing of Training the Unemployed in a Changing Economy The Case of East Germany After Unification, IAB Discussion Paper, 14/2005
- Mosley, H., H. Schütz and G. Schmid (2003), Effizienz der Arbeitsämter: Leistungsvergleich und Reformpraxis, edition sigma: Berlin.
- OECD (2004), Benefits and Wages: OECD Indicators, Paris.
- Pannenberg, M. (1995), Weiterbildungsaktivitäten und Erwerbsbiographie, Eine empirische Analyse für Deutschland, Frankfurt am Main, New York: Campus Verlag.
- Pannenberg, M. and J. Schwarze (1996), Unemployment, Labor Market Training Programmes and Regional Wages: An Extended Wage Curve Approach. DIW DP 139, Berlin.
- Pfeiffer, F. and F. Reize (2000), Business start-ups by the unemployed an econometric analysis based on firm data, *Labour Economics* 7, 629-663.
- Reinowski, E., B. Schultz and J. Wiemers (2003), Evaluation von Maßnahmen der aktiven Arbeitsmarktpolitik mit Hilfe eines iterativen Matching-Algorithmus Eine Fallstudie über langzeitarbeitslose Maßnahmeteilnehmer in Sachsen, IWH DP Nr. 173.
- Reinowski, E., B. Schultz and J. Wiemers (2004), Evaluation of Further Training Programmes with an Optimal Matching Algorithm, *mimeo*, IWH.
- RWI, ISG, GISA, IWH, M. Burda und M. Kvasnicka (2005), Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission Modul 1f: Verbesserung der beschäftigungspolitischen Rahmenbedingungen und Makrowirkungen der aktiven Arbeitsmarktpolitik, June. BMAS Forschungsbericht (Research report of the Federal Ministry for Labour and Social Affairs).
- Schmid G., S. Speckesser and C. Hilbert (2001), Does Active Labour Market Policy Matter? An Aggregate Analysis for Germany, in de Koning, J. and H. Mosley (Eds.) Labour Market Policy and Unemployment Impact and Process Evaluations in Selected European Countries, Cheltenham. E. Elgar.
- SÖSTRA, Compass, IMU, PIW (2005), Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission Modul 1c: Arbeitsbeschaffungsmaßnahmen, June. BMAS Forschungsbericht (Research report of the Federal Ministry for Labour and Social Affairs).
- Vollkommer, D. (2004): Regionalisierung der aktiven Arbeitsmarktpolitik, Nürnberg, Beiträge zur Arbeitsmarkt- und Berufsforschung 287.
- Wunsch, C. (2005), Labour Market Policy in Germany: Institutions, Instruments and Reforms since Unification, Discussion paper 2005-06, Universität St. Gallen.
- WZB, infas (2005), Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission – Modul 1a: Neuausrichtung der Arbeitsvermittlung, June. BMAS Forschungsbericht (Research report of the Federal Ministry for Labour and Social Affairs).
- ZEW, IAB, IAT (2005), Evaluation der Maßnahmen zur Umsetzung der Vorschläge der Hartz-Kommission Modul 1d: Eingliederungszuschüsse und Entgeltsicherung, June. BMAS Forschungsbericht (Research report of the Federal Ministry for Labour and Social Affairs).