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

Lena Jacobi and Jochen Kluve

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*. Focusing on active policy measures, we delineate the rationale for reform and its main principles. As preliminary 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 active labour market policy 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.

#### **Contents**

- 1 Introduction
- 2 Economic situation and labour market institutions before Hartz
- 3 Core elements of the Hartz reforms
- 3.1 Increasing the effectiveness and efficiency of services and measures
- 3.2 Activation of the unemployed
- 3.3 Labour market deregulation
- 4 Labour market policy effectiveness before and after Hartz
- 4.1 Increasing the effectiveness and efficiency of labour market services and policy measures
- 4.2 Activating the unemployed
- 4.3 Labour market deregulation
- 4.4 Macro-level evaluation
- 4.5 Summary of policy effectiveness before and after Hartz
- 5 Conclusion

#### References

ZAF 1/2007, S. 45-64 45

<sup>\*</sup> This paper was released for publication by the responsible editor in October 2006.

#### 1 Introduction

In times of high unemployment, the necessity for 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 Services<sup>1</sup> to overcome the so-called *reform bottleneck* ("Reformstau") and start a series of rather radical – given the prior reluctance – changes of active and passive labour market policies.

The resulting Hartz reforms - named after the chairman heading the independent expert commission that worked out the blueprint for the reform package<sup>2</sup> – are considered the most far-reaching reform endeavour in the history of the German welfare state, and consist of four laws, the so-called Hartz I-IV laws, that were implemented step by step on Jan 1st 2003 (Hartz I and II), Jan 1st 2004 (Hartz III) and Jan 1st 2005 (Hartz IV). While Hartz IV constitutes a comprehensive modification of the unemployment benefit and social assistance schemes, Hartz I-III modernised the organisational structure of the public employment services, modified many of the already existing measures of Active Labour Market Policy (ALMP) and introduced a set of new ones. The laws contain a set of specific policy measures that merge to a three-part reform strategy: (a) improving employment services and policy measures, (b) activating the unemployed, and (c) stimulating employment demand by deregulating 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. The Hartz laws I–III were evaluated during the years 2004 to 2006, and Hartz IV will be evaluated from 2006 onwards. Given the scope of the reform endeavour, the evaluation of Hartz I–III 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. In practice, the Hartz I–III evaluation has therefore involved more than 20

<sup>1</sup> The Federal Employment Services were accused of massive fraud in the reporting of successful job placements.

economic and sociological research institutes which, using methods based on qualitative case study approaches as well as rigorous econometric analyses of administrative and survey data, face the challenge of disentangling the impacts of specific measures in a setting characterised (a) by the simultaneous alteration of measures *and* institutional context, and (b) by the fact that many of the 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 reforms. Focusing 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. It has to be noted, however, that at present the evidence regarding policy effectiveness after Hartz is based on rather short observation periods, and therefore the findings are still preliminary at the present time.

The paper is organised as follows: section one gives an overview of the German economic situation since unification in 1990, briefly characterising the problematic features of the eastern and western 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 five concludes.

# 2 Economic situation and labour market institutions before Hartz

Since the 1990s, Germany has proved 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. At the same time, employment even decreased slightly (by 0.4%) and unemployment rates are higher than ever, ranging between 9.6% in western and 18.6% in eastern Germany in 2005.

Certainly the unification in 1990 and its repercussions have contributed to Germany's poor perform-

<sup>&</sup>lt;sup>2</sup> "Commission for Modern Labour Market Services" (Kommission für Moderne Dienstleistungen am Arbeitsmarkt).

ance. Unification suddenly increased the labour force by roughly one third, 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 eastern German wages to the comparatively high western 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 eastern German economy experienced rising unemployment and continuing dependence on federal subsidies and transfer payments from West to East. In addition to the high fiscal costs of unification, the Maastricht criteria further reduced the government's scope for expansive growth policies.

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 2001), indicating that structural factors play an important role in the German unemployment problem.

Figure 1 shows the trend in employment subject to social security contributions (sozialversicherungs-pflichtige Beschäftigung) and the trend in employment with low pay for which exemption from social security contributions applies (geringfügig entlohnte Beschäftigung). In western Germany, we observe a decrease in the number of employees covered by social security since 2002. Almost at the same time, low-wage employment has steadily increased. In eastern Germany, the decrease in regular employment and the increase in low-wage employment can already be found at the beginning of the observation period in 2000.

In Figure 2 we see the number of unemployed individuals and the number of participants in training and job creation programmes for western and eastern 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 western Germany the number of programme participants was relatively stable over this period, decreasing only slightly, the figures for eastern Germany document the massive use of ALMP measures during the early 1990s and a substantial decrease over recent years.

#### Labour market institutions

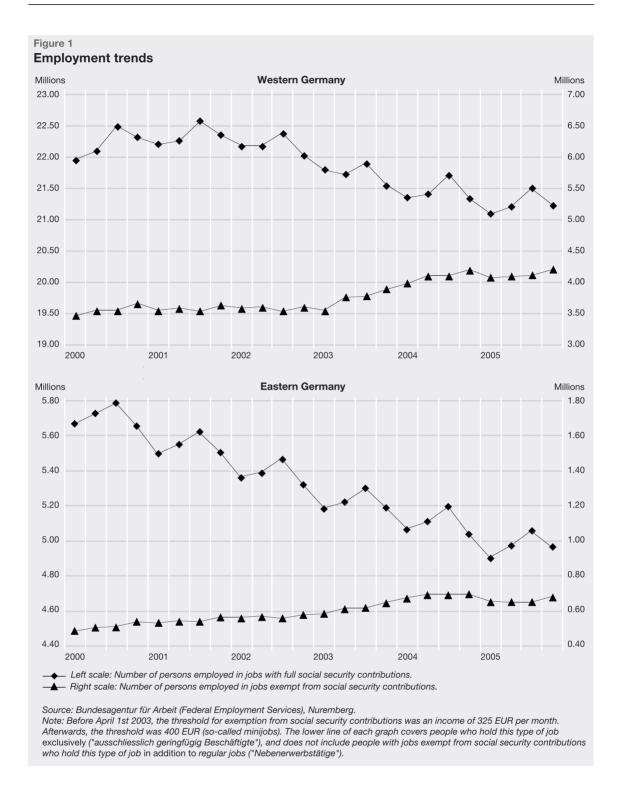
Compulsory unemployment insurance was introduced in Germany as early as in 1927, complement-

ing the then already existing insurances for health, accident and old age. After World War II a generous benefit system emerged, financed by contributions and taxes. 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 Services. In earlier years, when unemployment was still low, measures were designed to prevent rather than combat 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 eastern Germany. In 1992, for instance, the number of people participating in either a job creation or training programme exceeded the number of unemployed (Figure 2).

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 as a 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 after entitlement to unemployment benefit expired and without a time limit, still reached 57 % (53%) of the last net income.

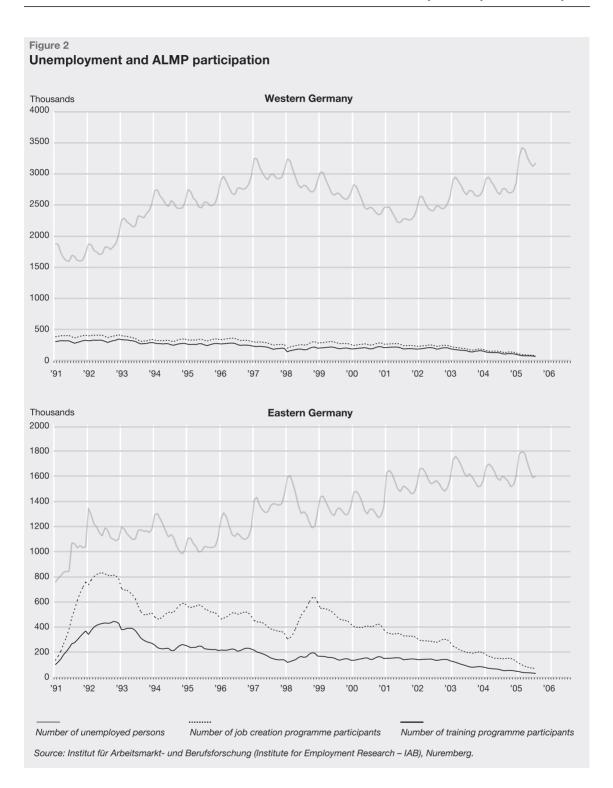
The unlimited duration of unemployment benefit payments was an extraordinary feature of the German unemployment benefit system, leading to replacement rates for long-term unemployed which were higher than in any other OECD country (OECD 2004). The replacement rates of short-term unemployed, in contrast, 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 basis. It was possible to supplement unemployment benefits with 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 a benefit recipient's additional



earned income. 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 western Germany in the year 2000 received an income that

was only 15.3% below that of a comparable family with a single earner receiving an average unskilled worker's wage. In eastern Germany the respective difference was only 11.5%.



Compared with 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 expenditure 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

services 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 individual profiling of each client, 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 work disincentives and increasing longterm unemployment, deteriorating skills and thus worsening the mismatch on the labour market. The public employment services were accused of operating inefficiently, being customer-unfriendly and failing to push job seekers sufficiently to search for a job. The mix of active measures, focussing on training measures and public job creation schemes with long durations, was criticised for keeping 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 postparticipation treatment effects of many programmes (e.g. Lechner 2000; Caliendo et al. 2003).

The so-called Hartz reforms, which were subsequently implemented during the period 2003–2005, 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 enforc-

ing the so-called principle of "rights and duties" (*Fördern und Fordern*), and (c) stimulating employment demand by deregulating the labour market.<sup>3</sup>

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

## 3.1 Increasing the 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 criterion 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 offices. Now, each employment office has to fulfil quantitative goals which are individually set for each type of agency, while at the

Table 1
Cornerstones of the Hartz reforms

a) Increasing effectiveness and efficiency of labour market services and policy measures	b) Activating the unemployed	c) Stimulating employment demand by labour market deregulation
<ul> <li>Re-organisation of local employment offices</li> <li>Introduction of quasi markets</li> <li>Improved targeting</li> <li>Evaluation mandate</li> </ul>	<ul> <li>Re-organisation of the benefit system</li> <li>Sanctions</li> <li>New policy mix giving priority to measures requiring proactive behaviour of the unemployed</li> <li>Make work pay</li> </ul>	Deregulation of the temporary work sector     Exemptions from restricitons on fix-term contracts     Exemptions from restrictions on dismissal protection

<sup>&</sup>lt;sup>3</sup> The Federal Employment Service translates "Fördern und Fordern" as "Challenge and Promotion".

same time having a wider scope of discretion on the choice of policy mix. The formerly hierarchically organised employment offices are to be converted into customer-orientated one-stop-centres. The range of services provided has been extended, ranging from advising and counselling services to social services and the administration of benefit payments. The caseload of caseworkers is targeted to be reduced and every job seeker is assigned to a particular 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 (Vermittlungsgutschein) and training measures (Bildungsgutschein). Each individual whom the public employment service has been 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 job seeker 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 placement via temporary work: since 2003, every local employment office sets up a "Staff Service Agency" (Personal Service Agentur (PSA)) that acts as a temporary work agency for the unemployed. To this end, the local employment office may either contract out to a private temporary work agency or, if no provider is available, may run a PSA itself. The local employment office may delegate hard-to-place clients to the PSA, which in return receives a monthly lump sum fee for employing these workers. The PSA may hire out the worker temporarily to other firms or provide a permanent placement. The PSA receives a bonus for each placement into employment lasting at least three months and another bonus if the placed person is still employed after six months. During periods of inactivity, the PSA should provide training measures to the worker. Therefore, PSAs encompass aspects of both training measures and placement services.

Third, the reform aims at improving the *targeting* of active measures and the *allocation of measures and resources*. To this end, the statutory regulation of eligibility conditions is reduced, now leaving a wider scope for individually matching clients to measures.

The 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 then assign the client to one 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 are likely to 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 job seeker. Active labour market policy measures are available mainly for the types II "counselling and activating" and III "counselling and support". The type I "market client" is expected to re-integrate without special assistance, while the fourth type, "supervision", is deemed unlikely to benefit 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 uses cream skimming in order to choose those clients who will benefit most from training. Only clients who are conjectured to have a 70 % probability of finding a job after the measure will be admitted. Accordingly, training providers have to produce a 70% success rate of respective participants in order to be commissioned by the employment agency. In contrast, job creation measures have been re-designed to target only the very hard-to-place unemployed. This means that public employment will 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 no longer regain 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 in and spending on 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 optimise existing programmes continuously 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 was subsequently 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).

#### 3.2 Activation of the unemployed

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. The new policy mix is more strongly orientated towards measures for job seekers who actively 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. The active measures that best represent the new activation strategy are the start-up subsidies. These are a relatively new component of German active labour market policy. Though a so-called "bridging allowance" (Überbrückungsgeld) was introduced as early as 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 flat-rate social security contribution. In order to receive the subsidy, the chamber of commerce has to approve the business plan. The reform introduced an alternative subsidy, the so-called "Me, Inc." (Ich-AG) subsidy, which is independent of prior social security contributions.<sup>4</sup> 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, 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 the eligibility conditions of so-called integration subsidies in order to facilitate access to wage subsidies, giving priority to older and disabled workers. Generally, the 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 if the employer has apparently dismissed a worker in order to receive the subsidy or if he had already employed the respective worker within the previous four years. Furthermore, the Hartz reform introduced social security subsidies for employers who recruit an older worker. A firm which hires a worker aged 55 or older is exempt from paying contributions 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 for the unemployed. The reform did not reduce the very high marginal taxes on people who move from unemployment to employment. Instead, new forms of wage subsidies were introduced and existing ones were modified or extended. The start-up subsidies mentioned above are one example. Furthermore, the reform introduced incentives for workers aged 50 and older to take up employment even if it pays less than previous employment. In these cases, older workers may receive a wage subsidy, the so-called wage protection, when they accept a job offer that pays less than their previous job. This wage subsidy amounts to 50 % of the difference between the previous wage and the current wage. It is paid for the same duration as the unemployment benefit would have been paid if the person had remained unemployed.

Before the reform, incomes of up to 325 Euros per month were *exempt* from social security contributions. The reform raised this threshold to 400 Euros, and substantially simplified the administrative procedures for these now so-called "minijobs". In addition, the reform introduced "midijobs", a type of employment with *reduced* social security contributions for the income range of 400,01 to 800 Euros per month. The amount of social security contributions depends on the gross income and increases from zero contributions at 400 Euros to full contributions at 800 Euros. Both minijobs and midijobs are generally applicable, i.e. they are not confined to the unemployed.

The reform also introduced *sanction* elements, i.e. additional ways to effectively monitor the job seek-

 $<sup>^{\</sup>rm 4}$  The Economist (Feb 2006) translates the subsidy as "Me-company".

er's job search activities and personal efforts to reintegrate into the labour market. The job seeker 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 area 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 with sanctions in the form of temporary benefit reductions if he or she deviates from the integration agreement or does not cooperate appropriately. 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 PSAs.

Although in this paper we focus on active labour market policy (Hartz I-III), for the sake of completeness we will also briefly comment on the strategy for reforming the benefit system (Hartz IV). Whereas before the reform previous social security contributions were the key criterion for benefit access, now access to benefits and participation in active labour market policy programmes 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 so-called benefit type I (Arbeitslosengeld I, or ALG I) for the first 6 to 12 months of unemployment. Thereafter, the person receives a flat-rate means-tested benefit type II (Arbeitslosengeld II, or ALG II). Individuals who have never paid social security contributions but who are deemed capable of working will receive benefit type II right from the beginning. Benefit type II is not earnings-based, as the unemployment assistance was 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 exempt from "duties". Whereas benefit type I is administered by the local employment office, benefit type II is administered at municipal level, either by a cooperation of the employment office and the municipality (Arbeitsgemeinschaft, ARGE) or by the municipality alone (Optierende Kommune).

#### 3.3 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 gradually been 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 publicly sponsored Staff Service Agencies as a new form of placement-orientated temporary work for hard-to-place individuals.

With respect to dismissal regulations and fixed-term contract regulations, the reform did not deregulate standard employment relations in a general way. Instead, 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 applied 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 apply to firms with up to 10 employees.

## 4 Labour market policy effectiveness before and after Hartz

For a long time the evaluation of German ALMP suffered from a lack of suitable data. Only very re-

<sup>&</sup>lt;sup>5</sup> The reduction of the age threshold for exemptions regarding fixed-term contracts has meanwhile been declared null and void by a ruling of the EU Court of Justice.

cently has good quality data become relatively widely available to researchers. Early studies on ALMP effectiveness were usually based on the GSOEP (German SocioEconomic Panel) or, for eastern 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 policy 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 at local employment office level (Bender et al. 2005). These data provide a large number of observations and cover rather long time periods. They therefore make it possible to detect short-term 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 recently been made available to researchers 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 concentrated 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 2). 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 sections are first results of the evaluations of the Hartz laws I-III. The evaluation of Hartz IV, which basically comprises the reform of the benefit system and the introduction of benefit type II combining unemployment and social assistance, will not begin until the autumn of 2006.

# 4.1 Increasing the effectiveness and efficiency of labour market services and policy measures

Major policy changes aiming at improving the effectiveness and efficiency of 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 sections.

#### 4.1.1 Placement services

There are only two studies on the effectiveness of placement services before the reform. The DEAbased 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 western German local employment offices. The analysis is supplemented 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. They suggest that the 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 western German federal state of Hesse. The regional employment office 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 offices offered courses on job search activities that provide advice on writing application letters, CVs, participating in job interviews etc. Although the effects vary across groups, in general these measures do not produce positive results.

The Hartz reform converted the former employment offices into customer-orientated service centres (Kundenzentrum). These are assessed in the study by WZB and infas (2005) using a conditional difference-in-differences-analysis which exploits the fact that the customer service centres were introduced at different points in time. Ten employment service offices that have already been transformed into customer service centres are matched with ten offices that have not. Data is used from the inflow into unemployment of the respective offices. The results indicate positive effects of customer service centres on the integration into regular employment, though the effects are not significant. This might be due to the fact that the number of offices 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 eastern 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 with clients who have remained under the public employment service. External placement services can be utilised either by the client himself, using a placement voucher (Vermittlungsgutschein), or by the public employment service who can assign clients to external providers (Beauftragung Dritter). 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 prospects of entering employment. It appears that many clients who had received placement vouchers did not actually use them. In eastern Germany, those who found a job using a placement voucher remained 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 does not show significant effects either. Finally, the assignment to PSAs produces significant locking-in effects that delay the integration of workers into regular, non-PSA employment.

#### 4.1.2 Training measures

Training measures have been evaluated by numerous studies. Since studies mostly focus on either eastern or western Germany, we present results for each region separately. Early evaluation studies on training in eastern 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 of Saxony-Anhalt, as do Bergemann et al. (2004). Reinowski et al. (2003, 2004) use the Saxony microcensus. 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 *eastern Germany*. One exception is Hübler (1997), who finds negative effects for women. This result contrasts with the finding obtained by 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 can be distinguished. Fitzenberger and Speckesser (2005) concentrate on the "provision of specific professional skills" which is a special type of further vocational training programmes. Lechner et al. (2005) distinguish between short training (up to 6 months), long training (over 6 months), retraining, and training in practice firms.

All of the studies based on the new data find significant evidence of locking-in effects for virtually all types of training, i.e. the labour market performance is worse for participants compared with 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 compensate for 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 the 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 western 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, the results are mixed: Pannenberg (1995) and Hujer et al. (1998) do not find significant positive effects, while Hujer and

Wellner (2000) do find positive effects, but 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 takes place, on average, at an earlier stage in the unemployment spell. Third, course quality is expected to improve due to 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 people who otherwise would have drifted into non-participation. Furthermore, effects of prereform 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 present time. The cost-effectiveness of measures before the reform was negative. By shortening course durations and better targeting, the reform was able to reduce the gap between costs and benefits, though the balance is still negative.

#### 4.1.3 Job creation schemes

For a long time, job creation schemes could be evaluated only for eastern Germany because data sources that provide information on participation in job creation schemes were limited to eastern Germany only. These are the Labour Market Monitor East which is used by Hübler (1997), the Labour Market Monitor of the federal state of Saxony-Anhalt, which is used by Bergemann et al. (2000), Eichler and Lechner (2002) and Bergemann (2005), and the Saxony microcensus 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 re-employment probability. Furthermore, she reports significantly positive effects on men's and women's probability of remaining employed. Caliendo et al. (2003) use the recently derived administrative data for the years 2000-2002, which provides information on programme effects in western Germany for the first time. Their results are pessimistic, revealing negative mean employment effects. Positive employment effects are limited to a few socio-demographic groups, namely women over 50, the long-term unemployed and hard-to-place women in western Germany as well as female long-term unemployed in eastern Germany. However, since the observation period is rather short, the negative effects might represent locking-in effects similar to those found for training programmes.

The evaluation study by SÖSTRA, Compass, IMU, PIW (2005) provides new evidence for the period 2000–2004. At the present time, the results on job creation schemes after Hartz are still preliminary. The authors use administrative data of people 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 of leaving unemployment is assessed by comparing the survival functions of treated and nontreated 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 western 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 the effects of the Hartz reforms, the study finds negative treatment effects for the postreform period, too, although the magnitude of the effects seems to have decreased. Since 2004 it has been a statutory objective of job creation schemes to generate or preserve the "employability" of participants, rather than providing actual employment only.

#### 4.2 Activating the unemployed

The Hartz reform shifts priority towards measures that require active behaviour of the unemployed and promote their direct integration into regular employment (cf. section 3.2). 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.

#### 4.2.1 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 (Eingliederungszuschüsse) before Hartz. Jaenichen (2002) collects administrative data and survey data for a cohort of unemployed workers that started subsidised employment between January and April 1999 and a control group from selected Federal Employment Service districts throughout Germany. She finds that participating in integration subsidy programmes significantly reduces the probability of a worker being registered as unemployed. However, this might be partly due to the fact that, upon entering the programme, participants are no longer counted as unemployed and many participants are still in the programme at the end of the observation period. In the long run, when the subsidy has usually expired, the effect is still positive, although significantly so only in eastern 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 were 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 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 of being employed 6 months after entering unemployment by 2 percentage points. These effects seem to stem from significant positive effects in eastern Germany only, while in western 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 the type, length and target group of the subsidy, this probability is 20 to 50 percentage points higher for the treatment group than for the comparison group. However, there are some indications of windfall gains.

#### 4.2.2 Start-up subsidies

Only little empirical evidence exists on the effectiveness of the "bridging allowance" start-up subsidy (Überbrückungsgeld) for the unemployed. The study by Pfeiffer and Reize (2000) compares firm survival and employment growth of start-ups by unemployed persons receiving the bridging allowance and other, regular start-ups, based on firm data from 15 regions in eastern and western 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 people who decide to start up a business. The results show that 6 months after the bridging allowance expires participants have a lower probability of being unemployed. The effect is significant at a high level, especially for women. For the period after the reform, the data is supplemented by survey data for the treatment and control groups. The study confirms the positive results of the bridging allowance after the reform.

For the second, new type of start-up subsidy, the socalled "Me, Inc." (Ich-AG) 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 decreases gradually, 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 even 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.

#### 4.2.3 Wage protection for older workers

Wage protection (*Entgeltsicherung*) is a wage subsidy for workers aged 50 and older who take up employment in a job that pays less than their 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 on employment probabilities. The authors suggest that the insignificance might be due to low take-up of wage protection.

## 4.2.4 Employment with reduced social security contributions (minjob/midijob)

Various reform elements, including the introduction of minijobs and 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 people working in these earnings segments. Minijobs and midijobs constitute 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 being employed in the respective earnings 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 utilising 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 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, this increase includes approximately 250,000 persons employed in the income range of 326 to 400 Euros prior to the reform, who by definition became "minijobbers". Also included are around 850,000 persons who hold their minijob in addition to regular employment, a status not previously captured in the data.

Moreover, the incidence of intra-enterprise displacement of regular jobs cannot be ruled out, and employees who benefit from the regulations were rarely previously unemployed, in spite of hopes associated with this policy that especially unemployed individuals would increasingly take on minijobs 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.

#### 4.3 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 regulations, however, was not subjected to an evaluation.

#### 4.3.1 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 minijob/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.

#### 4.3.2 Fixed-term contracts for older workers

The effect of older workers being exempt from restrictions on fixed-term contracts (erleichterte Befristung älterer Arbeitnehmer/innen) is assessed by RWI et al. (2005) using a difference-in-differences estimator. Workers just above the minimum age for exemption (52 to 53 years old) constitute the treatment group, while workers just below this age (50-51 years old) are the control group. The exemption of workers over 52 years of age from restrictions on fixed-term contracts is expected to increase the number of older 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.

#### 4.4 Macro-level evaluation

In the evidence presented above, we have concentrated on micro-econometric studies dealing with single instruments of ALMP and their isolated effects. These kinds of studies have their virtues, but the evidence they provide is also limited. They are unable to uncover substitution and displacement processes and other effects that affect labour market performance at aggregate level. This could be the case in regions like eastern Germany, where labour market programmes are implemented on a very large scale. A considerable number of studies try to grasp such indirect effects in Germany, focusing on the macroeconomic impact of active labour market policies. Recent studies include Schmid et al. (2001), Fertig et al. (2006), Hagen (2003), Blien et al. (2003), Vollkommer (2004) and Hujer et al. (2005). All of these studies use administrative data from regional employment offices. Most studies focus on some indicators of matching efficiency. Exceptions are Pannenberg and Schwarze (1996), who examine wage effects, and Blien et al. (2003), who use regional employment growth as a dependent variable. The study by Pannenberg and Schwarze (1996) indicates a small negative impact of training measures on monthly wages in eastern Germany. Blien et al. (2003) provide evidence of positive effects of training and job creation programmes on employment growth in eastern Germany. There seems to be evidence of displacement effects by job creation schemes, as Hagen (2003) suggests. Further results regarding the effect on matching efficiency and unemployment rates are very mixed and rather inconclusive

The report by RWI et al. (2005) assesses the macroeconomic effects of ALMP after the Hartz reforms using administrative data of labour market outcomes and the respective "policy mix" at regional level. Regions are constructed as local labour markets on the basis of commuter flows in order to control for spill-over effects of regional policies. The results suggest that spending a larger amount on startup subsidies significantly increases the number of net exits from unemployment. The introduction of a new form of start-up subsidy by the Hartz reform reduced its magnitude, but the effect is still positive. In contrast, spending on job creation measures has a significantly negative effect on net exits from unemployment in eastern Germany and no effect in western Germany. Also integration subsidies have no effects on net exits. Generally, the entire reform, regardless of the specific policy mix, seems to have had positive effects on the net exit rate of the shortterm unemployed, while no effects could be found for the long-term unemployed. The positive results are mainly driven by positive effects on men.

## 4.5 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 the 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 of the effectiveness of the Hartz reforms (cf. also Bundesregierung 2006 and Kaltenborn et al. 2006). Column 4 is then intended to assess the "beforeafter difference", which - with explicit caution -

Table 2 **Effects of the Hartz reforms** 

Measure	Evidence before	Evidence after	Reform effect
a1. Placement services			
Customer service	(+)	(+)	(+) Introduction of customer service centres (Kundenzentrum) seems positive, but significance of effects unclear.
Placement vouchera (Vermittlungsgutschein)	n/a	0	No significant effect on re-employment probability.
Assignment to private placement providersa (Beauftragung Dritter)	n/a	0	No significant effect on re-employment probability.
Placement via temporary work (PSA)	n/a	_	PSAs reduce the employment probability of participants.
a2. Training	0 older studies/ (+) more recent studies	+	+ Exit rate into employment increased, locking-in effects reduced.
a3. Public job creation (ABM)	-	(–)	Measure remains detrimental after the reform.     (+) Magnitude of negative effect is decreasing.     Impact on "employability" unclear.
b1. Wage subsidies to employers (Eingliederungszuschüsse)	(+)	+	+ 20–50 percentage points higher probability of regular employment post-treatment.  Extent of windfall gains unclear.
b2. Start-up subsidies (Überbrückungsgeld, "Ich-AG")	(+)b	+	+ Subsidy significantly reduces risk of unemployment (decreasing over time). Some windfall beneficiaries exist.
b3. Wage protection for older workers (Entgeltsicherung)	n/a	0	0 No significant effect.
b4. Employment with reduced social security contributions			
Minijobs	n/a	+	Reform caused large increase in employees in minijobs (+1.8 million).  (-) Inflow from unemployment low. Incidence of intra-enterprise displacement cannot be ruled out.
Midijobs	n/a	(+)	<ul><li>(+) Modest effect on creation of midijobs (+125,000).</li><li>(-) Incidence of intra-enterprise displacement cannot be ruled out.</li></ul>
c1. Temporary work deregulation	n/a	+	+ 23,700 additional employees in temporary work 6 months after reform (short-term). Deregulation widely acclaimed.
c2. Fixed-term contracts for older workers	n/a	0	0 No significant effect.

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

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-Hartz 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

a Already since early 2002.

b Pre-reform evidence on bridging allowance only.

concerning general placement services – and hence are not directly comparable. Another caveat when interpreting the results is the fact that the post-reform observation period is short-term only.

The table summarizes the results discussed in more detail in the previous sections. Training and public job creation schemes, both of which were already used and evaluated extensively before the reform, appear to have been improved. The "improvement" of public job creation schemes, however, unfortunately merely implies that since the reform they appear less detrimental for participants' employment prospects than before. For another re-designed 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 vouchers, assignment to private placement providers, fixed-term contracts for older workers - 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 redesign of the customer service of public employment offices 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 the light of the fact that the starting situation upon which the reforms intended to improve was quite dismal.

#### 5 Conclusion

In this paper we have described 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. Following this 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 with other countries. Especially in eastern 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 clients. 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 work disincentives 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. First, public employment services were modernised along the lines of New Public Management. This includes results-based accountability of local employment offices, the outsourcing of many services and open competition between private service providers. The former employment offices were converted into customer-orientated one-stop-centres, offering individual profiling, job search assistance, social services and administration of benefit payments. Second, various policy changes implement an activation strategy according to the principles of "rights and duties". The entire benefit system was re-designed. Unemployment benefit levels and durations were reduced. Eligibility for subsistence allowances now differs according to a person's ability to work rather than according to 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. 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. Jobs with reduced social security contributions were introduced (midijobs), and the regulation for jobs exempt from any social security contributions was reformed (minijobs), both with the intention of providing greater incentives for individuals to take up employment in the low-wage sector. Third, the temporary work sector was deregulated and exemptions from restrictions on fixed-term contracts and dismissal protection were introduced.

Results of evaluation studies of German active labour market policies have been rather inconsistent for many years. This was probably 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 for example that most training measures seem to show considerable dynamics 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 result in 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 improved modestly. The results, which are still preliminary at the present time, 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 to the probability of re-employment. 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/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/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/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/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/S. L. Thomsen (2003): The Employment Effects of Job Creation Schemes in Germany: A Microeconometric Evaluation, IZA DP No. 1512.
- Caliendo, M./V. Steiner (2005): Aktive Arbeitsmarktpolitik in Deutschland: Bestandsaufnahme und Bewertung der mikroökonomischen Evaluationsergebnisse, DIW DP 515
- Eichler, M./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./J. Kluve/C. M. Schmidt/H. Apel/W. Friedrich/H. Hägele (2004): Die Hartz-Gesetze zur Arbeitsmarktpolitik Ein umfassendes Evaluationskonzept, RWI-Schriften 74, Duncker & Humblot: Berlin.
- Fertig, M./C. M. Schmidt/H. Schneider (2006): Active Labour Market Policy in Germany Is There a Successful Strategy?, Regional Science and Urban Economics, forthcoming.
- Fitzenberger, B./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./S. Speckesser (2000): Zur wissenschaftlichen Evaluation der Aktiven Arbeitsmarktpolitik in

- Deutschland: Ein Überblick, Mitteilungen aus der Arbeitsmarkt- und Berufsforschung 33, 357–370.
- Fitzenberger B./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./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./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/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/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/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/C. Zeiss (2004): The Effects of Vocational Training Programmes on the Duration of Unemployment in Germany, IZA DP No. 1117.
- Hujer, R./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 Propensity Score Matching, Mitteilungen aus der Arbeitsmarkt- und Berufsforschung 35, 327–351.
- Kaltenborn, B./P. Knerr/J. Schiwarov (2006): Hartz: Bilanz der Arbeitsmarkt- und Beschäftigungspolitik, Blickpunkt Arbeit und Wirtschaft 3/2006, Berlin.
- Klose, C./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/C. Wunsch (2004): Long-Run Effects of Public Sector Sponsored Training in West Germany, IZA DP No. 1443.
- Lechner, M./R. Miquel/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/ 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./J. Schwarze (1996): Unemployment, LaborMarket Training Programmes and Regional Wages: AnExtended Wage Curve Approach. DIW DP 139, Berlin.
- Pfeiffer, F/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/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/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 1 f: 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/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 Arbeitsmarktund 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).