The "family working-time benefits model" *(Familienarbeitszeit)*: Giving mothers more time for work, giving fathers more time for family

By Kai-Uwe Müller, Michael Neumann and Katharina Wrohlich

Two years ago, DIW Berlin introduced *"Familienarbeitszeit"*, which offers wage replacement for families in which both partners decide to take on reduced full-time employment (working hours amounting to roughly 80 percent of a full-time job, henceforth referred to as "three-quarters employment"). This study investigates further developments of this model: Apart from a more generous wage replacement variant, the study examines a simplified variant with a lump sum benefit that serves as a sensible alternative, since it entails fewer administrative burdens and lower overall costs. The benefit's eligibility requirements are also flexibilized: Instead of having to adhere to a fixed working-time requirement (base model), any parent whose working hours fall within the "corridor" of 28 to 32 hours per week is entitled to the benefits (corridor model). The corridor model increases the number of eligible recipients, and thus utilization rises somewhat more than it does with the base model; however, a corridor model would also come with higher costs.

Since the 2007 reform of the German parental benefits system *(Elterngeld)*, German policymakers have been initiating further reforms to improve work-life balance. Nevertheless, for many families, and especially for women, reconciling child rearing with career continues to present major challenges. Various measures implemented with the goal of alleviating these difficulties—such as a law entitling all children over 12 months old to day-care, the significant expansion of day schools,[1] and the introduction of *ElterngeldPlus*—have failed to fundamentally change the situation.[2]

Although government-funded childcare certainly plays an important role when it comes to helping women balance career and family, it is not the only important factor: Fathers also need to be more involved in childcare and domestic duties. And this is what young families desire, according to a recent study conducted by the Allensbach Institute: If they "did not have to take anything into consideration," nearly half (47 percent) of all parents with children under 6 years old would opt for a scenario in which both partners work equal or nearly equal hours. Twenty-eight percent of the parents surveyed indicated that the ideal working-hours setup under these conditions is one in which "both [parents work] part-time (between 15 and 34 hours)." [3] But due to financial circum-

1 See: Marcus et. al. 2013 (See https://www.diw.de/documents/publikationen/73/diw_01.c.423906.de/13-27-3.pdf)

2 According to a recently published study by the Thomson Reuters Foundation and the Rockefeller Foundation, the concept of reconciling career and family has been met with skepticism in Germany. Worldwide, about 47 percent of women are confident that they can have a family without harming their career. In Germany, this proportion is 21 percent, which lands the country in second-to-last place. (See: http://www.faz.net/aktuell/wirtschaft/menschen-wirtschaft/in-deutschland-sind-kind-und-karriere-kaum-vereinbar-13854493.html).

3 Just under 40 percent of respondents explicitly favor a classic "primary breadwinner model" in which the father works far more than does the mother. See Allensbach Institute (2015): *Weichenstellungen für die Aufgabenteilung in Familie und Beruf, Untersuchungsbericht zu einer repräsentativen Befragung von Elternpaaren im Auftrag des Bundesministeriums für Familie, Senioren, Frauen und Jugend.* p.51, http://www.ifd-allensbach.de/uploads/tx_studies/Weichenstellungen.pdf.

stances or resistance from their employers, most parents are unable to make this scenario a reality. [4]

To increase the financial attractiveness of a partner-based working-time model, and to help families achieve their ideal work-life scenario, the Friedrich Ebert Foundation proposed creating a "wage replacement" benefit based on the working hours of both parents: the *Familienarbeitszeit* model.[5] The basic idea is that families with children aged 1 to 3 receive a financial benefit as long as *both* parents are engaged in three-quarters employment. This incentivizes a scenario in which primary breadwinners (usually fathers) have more time for child rearing. Unlike unconditional cash benefits such as *Betreuungsgeld* (childcare subsidies), it avoids the negative work incentives for secondary earners (usually mothers) that can often crop up in this context. [6] In fact, it promotes the exact opposite: The *Familienarbeitszeit* benefit is explicitly tied to a scenario in which both parents are working, and in equal amounts.

Two years ago, after being commissioned by the Friedrich Ebert Foundation and the Hans Böckler Foundation, DIW Berlin started putting plans for such a benefit into concrete terms and examining its impact on working hours as well as its associated costs. It was found that the proportion of families with both parents engaged in three-quarters employment could be doubled, from roughly one percent to two percent, through the implementation of this wage replacement. [7] (While this benefit is also designed for single parents who are engaged in three-quarters employment, the present study only examines results for two-parent households.)

Since the publication of the initial results, the *Familienarbeitszeit* model has become a hotly debated topic in the public discourse. DIW Berlin took the suggestions generated amid this discussion and factored them into a recent study commissioned by the Friedrich Ebert Foundation in which the researchers investigated new variants of the *Familienarbeitszeit* benefit. [8] In order to do this, the study's authors updated and broadened the database (box), then compared a variant of

4 Ibid, p. 52.

5 For more on this, see Müller, Kai-Uwe; Michael Neumann und Katharina Wrohlich (2013): *Familienarbeitszeit – Wirkungen und Kosten einer Lohnersatzleistung bei reduzierter Vollzeitbeschäftigung,* Friedrich-Ebert-Stiftung, Forum Politik und Gesellschaft, Berlin.

6 See Müller, Kai-Uwe und Katharina Wrohlich (2015): "Two steps forward – one step back? Evaluating contradicting child care policies in Germany," CESifo Economic Studies, forthcoming.

7 See Müller, Kai-Uwe; Michael Neumann and Katharina Wrohlich (2013), lc.

8 For more on this, see: Müller, Kai-Uwe; Michael Neumann and Katharina Wrohlich (2015): *Familienarbeitszeit – Wirkungen und Kosten einer Lohnersatzleistung bei reduzierter Vollzeitbeschäftigung.* Follow-up project: *Auswirkungen einer Korridorlösung und der Modellierung von Restriktionen am Arbeitsmarkt*, Policy Advice Compact No. 105, DIW Berlin.

Box

Methodology and data basis

To examine the effects and anticipated costs of a Familienarbeitszeit financial benefit, a microsimulation model with behavioral adjustment is used. Using this approach, the changes in incomes for households and fiscal effects of not-yet-implemented reforms can be calculated. Then, based on an estimated behavior model, the changes to the labor supply of individuals that are induced by such a reform can be simulated (See also: Müller et al. 2013).

The first element of a microsimulation model is a population-representative microdata set that contains detailed information on income, working hours, and other socio-demographic characteristics. For the present application, a sample comprising data from the German Socio-Economic Panel (SOEP) and the survey „Familien in Deutschland" ("Families in Germany"), or FiD, is used. The SOEP[1] is a wide-ranging representative longitudinal study of private German households that has been being carried out since 1984. Since 2010, the supplementary FiD[2] has been available. Like the SOEP, it is conducted by DIW in cooperation with TNS Infratest Sozialforschung.

The FiD is also an annual follow-up survey focusing on households with children in Germany (in particular low-income families, families with several children, single parents, and families with very young children). From the combination of SOEP and FiD, a sample with a sufficient number (about 1,900 per year) of observations on families with children between the ages of 1 and 3 is used to make inference for this group (about 1.7 million families).

The second element of the microsimulation model is a tax-transfer simulation model.[3] Based on the SOEP and FiD, the disposable income for each household is simulated individually. The simulation is carried out for the status quo and the hypothetical reform alternatives. On this basis, both the changes in households' disposable income and the reforms' fiscal effects can initially be calculated, assuming that the individuals are not adapting their behavior due to the reform.

1 See, in detail: Wagner, G.G.; Frick, J.R. and J. Schupp: "The German Socio-Economic Panel Study (SOEP) – Scope, Evolution and Enhancements. Schmollers Jahrbuch, 127(1): 139–169, 2007.

2 See: Schröder, M.; Siegers, R. und C.K. Spieß: *"Familien in Deutschland"* (FiD) – Enhancing Research on Families in Germany. SOEPpapers Number 556.

3 For the details on the tax-transfer simulation model used here, see: Steiner, Viktor; Wrohlich, Katharina; Haan, Peter and Johannes Geyer (2012), lc.

The model incorporates the essential elements of the German tax and transfer system (for example, income tax, social security contributions, and all welfare transfers) taking into account the legal status in 2015.

The third element of the microsimulation comprises a structural econometric behavioral model that reflects the employment choices of mothers and fathers as a simultaneous decision. This model is specified as a discrete choice model.[4] It is assumed that a household (or a single parent) selects among several alternatives made up of various combinations of the partners' working hours, corresponding free time, and associated net income. Apart from non-employment, marginal employment (in this model, this category only exists for women), part-time, full-time, and full-time with overtime (in this model, this category only exists for men), two versions of the "reduced full-time" working hours (between 25 and 29 hours per week, and between 30 and 35 hours per week) can be selected.

While in the base model, only the "bigger" variant of the three-quarters employment is supported, both variants are entitled to benefits in the „corridor model," which is the Familienarbeitszeit expansion benefit under investigation here. Due to the similarity of the two variants of "reduced full-time", the choice process is modeled in two steps: First, households choose from among the different variants of reduced full-time employment. Secondly, they must then decide between the utility-maximizing variant and all other alternatives.

For the estimation of the parameters of the labor supply model, only the second stage decision is taken into account. In doing so, the hypothetical incomes for every household for all possible working-time categories are simulated. Assuming that preferences and social norms (at least in the short term) are not significantly altered by a reform, the changes in households' labor supply behavior that result from the reform-driven income changes can be predicted based on the behavioral parameters identified in the model.

The data for the present study is taken from three waves of the SOEP and FID. The sample includes 4,465 couples and 1,174 single mothers with children aged 1 to 3 (Table). This represents more than 4.5 million families in Germany. Couples where one parent is self-employed, in job training, retired, or over 65 years old are excluded for the purpose of this simulation model. After removing these couples, 3,355 parent couples and approximately 1,001 single parents in the age group remain for the simulation.

To estimate the structural parameters, the entire sample of the behavior model's waves from 2010 to 2012 is used. Because some families appear in several years, the record is based on observations of 2,064 different pairs and 660 different single parents. The simulation of the reform-effects is based solely on data from 2012. The income variables are forward-projected to 2015 with constant growth rates, to be as close to the current situation.

Table

Description of the sample

Group	Number of observations	Share in percent	Extra-polation	Share in percent
Couples				
Families with children aged 1 to 3	4,465	100.00	3,533,726	100.00
Thereof:				
Not self-employed	4,105	91.94	3,230,180	91.41
Non-negative income	4,100	91.83	3,228,563	91.36
Mother and father aged under 65	4,098	91.78	3,221,925	91.18
Flexible labor supply[1]	3,355	75.14	2,656,495	75.18
Individual couples	2,064			
Single mothers				
Households with children aged 1 to 3	1,174	100.00	1,052,554	100.00
Thereof:				
Not self-employed	1,133	96.51	1,014,268	96.36
Non-negative income	1,132	96.42	1,011,685	96.12
Mother aged under 65	1,132	96.42	1,011,685	96.12
Flexible labor supply[1]	1,001	85.26	892,406	84.78
Individual households	660			

1 Not self-employed, in school or vocational training or retired.

Source: SOEP 2010, 2011, 2012; FiD 2010, 2011, 2012; own calculations.

4 See, for example, Van Soest, Arthur (1995): "Structural Models of Family Labor Supply: A Discrete Choice Approach." Journal of Human Resources, 30(1), S. 63–88.

Familienarbeitszeit with wage replacement to a variant of *Familienarbeitszeit* with a lump sum benefit.

Secondly, the researchers investigated to what extent a relaxation of the eligibility criteria related to working hours impacts the number of families entitled to the benefits. The current base model (the fixed working-time model, which requires that each parent work exactly 32 hours per week) was compared to a "working-time corridor model" in which both parents can be employed anywhere from 28 to 32 hours per week to be eligible for the benefits. Altogether, four different combinations were examined: either a "wage replacement" or a "lump sum" concept, plus either "a fixed working-time model" (base model) or a "working-time corridor model."

Wage replacement vs. lump sum

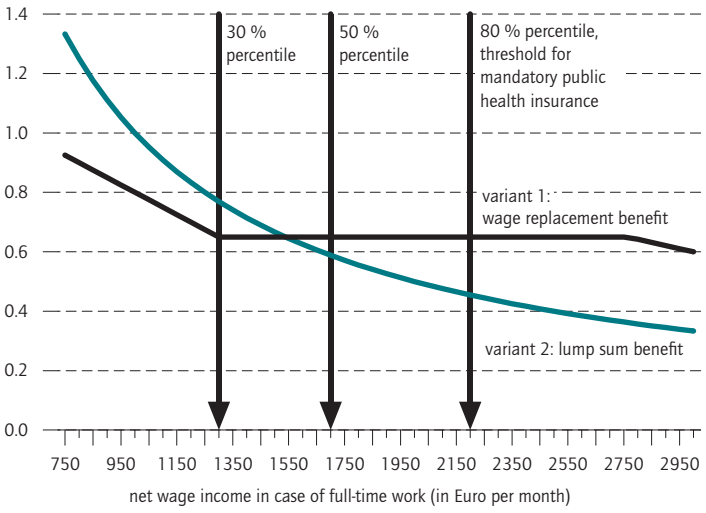
One way to incentivize couples to share work and household duties is through wage replacement: Here, both parents receive a certain percentage of the difference in net income between full-time employment and three-quarters employment, provided that all eligibility requirements are met. For families in the middle and upper income ranges, this study uses a replacement ratio of 65 percent. For families with a net income below 1,300 euros (which corresponds, approximately, to the 30th percentile[9]), the replacement ratio increases as the income decreases, at roughly 0.05 percentage points per euro. For high incomes, the wage replacement is capped at a maximum of 360 euros per month. Due to this capping, the replacement rate begins to drop at monthly incomes of 2,750 euros and higher (Figure).

An alternative to a subsidy based on an income-related wage replacement is a subsidy based on a lump sum. This would eliminate the costs of calculating the claim. With a lump sum, the benefit amount would be fixed at 250 euros per month per parent, since this is the amount—without taking into account behavioral adaptations—after which fiscal costs similar to those of calculating a claim would arise. For low incomes, a benefit of this amount would correspond to a replacement ratio of 100 percent or more; for middle incomes, roughly 60 percent; and for high incomes (80th percentile and above), roughly 45 percent. Compared with the initial version of the benefit with variable wage replacement, benefits with a lump sum would be increasingly more generous for families in the lower income range (the bottom 40 percent of the distribution); individuals with higher incomes, however, would profit significantly less from a lump sum. Benefits with a lump sum would therefore have more of a redistributive effect.

Figure

Replacement rate as a function of net wage

Percent of wage replacement



Source: Own Calculations.

Low-income families would be better off with a lump sum benefit rather than an wage replacement benefit.

"Fixed working-time" vs. "working-time corridor"

A major factor in *Familienarbeitszeit* is the required number of hours that each parent must be working in order to qualify for a corresponding financial benefit. The required amount in the original base model[10] (the "fixed working-time model" requiring roughly 32 working hours per partner) was often considered too restrictive from the perspective of workplace practices, particularly workers' representatives. For this reason, the study at hand also evaluates an alternative model in which each parent can work any number of hours within a "working-time corridor" of 28 to 32 hours per week. The option to choose any possible combination within the corridor allows families more flexibility.

9 Net wages are simulated based on the SOEP with the tax-transfer simulation model STSM. See: Steiner, Viktor; Wrohlich, Katharina; Haan, Peter and Johannes Geyer (2012): "Documentation of the Tax-Benefit Microsimulation Model STSM." Version 2012, Data Documentation 63, DIW Berlin. The gross earnings are based on figures from the Federal Employment Agency. See Federal Employment Agency (2010): *Beschäftigungsstatistik: Sozialversicherungspflichtige Bruttoarbeitsentgelte.* Bundesagentur für Arbeit (BA) – Statistik, Nürnberg. For these model calculations, the salaries of social insurance-obligated full-time employees are simulated.

10 See: Müller, Kai-Uwe, Michael Neumann, und Katharina Wrohlich (2013), lc.

A lump sum benefit leads to similar behavioral responses as wage replacement

As DIW Berlin's earlier study[11] demonstrated, wage replacement would cause the proportion of families in which both parents are engaged in exactly 80 percent of a full-time job to rise by 0.9 percentage points in the short term. If one initially maintains the fixed specification of working hours, higher effects arise for the more generous version of a wage replacement that is presented here: Based on the microsimulation model, the proportion of parents who use *Familienarbeitszeit* would rise by 1.8 percentage points if the benefits were paid as a wage replacement, to a total of around 2.5 percent (Table 1, columns 1 and 2). The average effect barely changes if instead of a wage replacement, a monthly lump sum of 250 Euros is paid out per month per parent (Table 2, columns 1 and 2).

The effects for individual groups differ only slightly. Families in East Germany would take greater advantage of *Familienarbeitszeit* than would families in West Germany. The benefit is clearly more attractive to families with one child than to families with several children. In addition, *Familienarbeitszeit* would be more frequently used in the upper income groups than in the lower ones, especially in the case of wage replacement. For example, two percent of families in the lowest income quartile choose this working-time model after its implementation, while among the highest income quartile, more than 3.6 percent do (Table 1, Column 1).

The differences according to income quartiles are slightly smaller in the case of the lump sum (Table 2, Column 1). Individuals with lower incomes receive a higher subsidy here, which increases the incentive for them to take advantage of *Familienarbeitszeit*. Inversely, the incentive to pursue three-quarters employment would be reduced for higher income groups. Similar average effects are therefore partly generated by different groups: In a lump sum concept, households with lower incomes would profit more strongly from the benefits.

In both design variants, the participation in the labor market and the volume of work increases in the different subgroups. Most notably, women's employment rates increase by around 0.4 percentage points, and women's total work volume increases by an average of just over one percent. In contrast, men actually work less (by just under 0.1 percent) because they are usually reducing their working hours from full-time jobs (Tables 1 and 2, columns 4 to 6)—but this is offset by the increase in women's working hours.

11 Ibid.

Working-time corridor model leads to higher use of Familienarbeitszeit

A more flexible design of the eligibility requirements regarding working hours would lead to a greater use of *Familienarbeitszeit*. If families in which both parents' respective working hours fell within the "corridor" of 28 and 32 hours a week were eligible, more couples would take advantage of the benefits: In the wage-replacement variant of this model, 3.2 percent of families would use the benefit (Table 3, column 1); in the lump sum variant, 2.9 percent families would use it (Table 4, column 1).

However, the expansion of the eligibility requirements leads to significantly more households qualifying for the benefit without having to make any changes. In addition to these so-called "windfall effects," there are also families who would opt for *Familienarbeitszeit* solely because of the more flexible requirements. These behavioral effects turn out to be lower in the working-time corridor model than they do in the fixed working-time model (base model): The proportion of couples who decide on a working-time scenario in compliance with the corridor model is 1.4 percentage points in the wage replacement variant and 1.1 percentage points in the lump sum variant. In the base model, this total increase is about 1.8 percentage points each in the wage replacement and lump sum variants (Tables 1 and 2, Column 2). However, in the case of the base model, a substantial proportion of this increase can be attributed to families switching from "similar" but non-qualifying working-time scenarios, i.e. the parents are employed between 28 to 31 hours each. To eliminate this element and better measure the behavioral effects in the case of the corridor model, the increase from more removed employment categories (fewer than 28 hours, or more than 32 hours per week) is used as a benchmark. In this instance, the behavioral effect turns out to be slightly lower in the base model than it is in both of the corridor model's variants, where it amounts to roughly 0.8 percentage points for each variant (Tables 1 and 2, Column 3).

By making the options more flexible, the number of possible recipients significantly increases, which means that more families are able to profit from the benefits. At the same time, the corridor model leads to only moderately higher behavioral effects related to the distribution of working time between both parents. Unlike it does in the base model, the overall work volume does not increase.

Manageable fiscal costs

Compared to other family-oriented benefits (such as *Elterngeld*, for example), the costs expected in the short-

Table 1

Behvarioural effects[1] couples – base model, variant 1: wage replacement benefit
In percent

	Familienarbeitszeit			Change of working hours			Change in participation	
	Share	Increase in percent points		All	Women	Men	Women	Men
	Overall	Overall	From categories other than within corridor of 28 to 32 hours					
All couples	2.53	1.79	0.84	0.18	1.03	−0.14	0.37	0.03
West	2.14	1.64	0.67	0.19	1.19	−0.11	0.38	0.02
East	4.56	2.58	1.71	0.09	0.64	−0.28	0.35	0.06
1st quartile	2.02	1.5	0.61	0.19	1.1	−0.09	0.36	0.02
2nd quartile	2.33	1.66	0.75	0.16	1.01	−0.12	0.35	0.02
3rd quartile	2.61	1.89	0.85	0.2	1.14	−0.14	0.4	0.03
4th quartile	3.64	2.34	1.38	0.14	0.84	−0.26	0.38	0.03
1 child	3.06	2.09	1.05	0.18	1.1	−0.18	0.41	0.02
More than 1 child	2.24	1.63	0.72	0.18	0.99	−0.11	0.35	0.03

1 All values are statistically significant at the 1 percent level.

Source: SOEP 2010, 2011, 2012; FiD 2010, 2011, 2012; own calculations.

Table 2

Behavioural effects[1] couples – base model, variant 2: lump sum benefit
In percent

	Familienarbeitszeit			Change of working hours			Change in participation	
	Share	Increase (in %-points)		All	Women	Men	Women	Men
	Overall	Overall	From categories other than within corridor of 28 to 32 hours					
All couples	2.56	1.82	0.84	0.2	1.1	−0.14	0.41	0.03
West	2.12	1.62	0.62	0.21	1.22	−0.1	0.4	0.02
East	4.84	2.86	1.97	0.13	0.8	−0.33	0.43	0.07
1st quartile	2.24	1.73	0.76	0.24	1.37	−0.11	0.48	0.03
2nd quartile	2.43	1.76	0.82	0.18	1.12	−0.13	0.4	0.03
3rd quartile	2.65	1.93	0.88	0.21	1.22	−0.15	0.44	0.03
4th quartile	3.17	1.86	0.95	0.12	0.64	−0.18	0.27	0.02
1 child	3.05	2.08	1.02	0.2	1.15	−0.17	0.43	0.03
More than 1 child	2.29	1.67	0.74	0.2	1.07	−0.11	0.39	0.03

1 All values are statistically significant at the 1 percent level.

Source: SOEP 2010, 2011, 2012; FiD 2010, 2011, 2012; own calculations.

term for *Familienarbeitszeit* are manageable.[12] This is, of course, due to the initially low number of eligible families. The gross costs comprise the sum of the cash benefits that are paid out to parents in the respective qualifying configurations. Depending on the variant, these costs amount to anywhere from 220 million euros (fixed working-time model with lump sum) to 350 million euros (corridor model with wage replacement) per year (Table 5).

But since most of the *Familienarbeitszeit* variants lead to an increase in work volume, the income tax reve-

12 The findings on the fiscal costs are related to the overall costs of the benefits for two-parent households and single-parent households.

Table 3

Behavioural effects couples—corridor model[1], variant 1: wage replacement benefit
In percent

	Familienarbeitszeit		Change of working hours			Change in participation	
	Overall share	Overall increase in percent points	All	Women	Men	Women	Men
All couples	3.2	1.39	−0.04	0.8	−0.35	0.55	0.04
West	2.83	1.23	0.01	1.02	−0.31	0.61	0.03
East	5.1	2.21	−0.24	0.24	−0.57	0.36	0.08
1st quartile	2.69	1.12	0.03	0.98	−0.27	0.59	0.04
2nd quartile	3	1.29	−0.03	0.84	−0.32	0.55	0.03
3rd quartile	3.29	1.44	−0.03	0.89	−0.35	0.59	0.04
4th quartile	4.26	1.97	−0.18	0.43	−0.53	0.44	0.05
1 child	3.76	1.66	−0.09	0.76	−0.42	0.56	0.03
More than 1 child	2.88	1.24	−0.01 n.s.	0.82	−0.3	0.54	0.04

1 In the case of the corridor-model, the total increase in families using "Familienarbeitszeit" is from couples from categories other than in the corridor of 28 to 32 hours by definition.
All values statistically significant at least at the 10 percent level (except for values marked with n.s.)

Source: SOEP 2010, 2011, 2012; FiD 2010, 2011, 2012; own calculations.

Table 4

Behavioural effects couples—corridor model[1], variant 1: lump sum benefit
In percent

	Familienarbeitszeit		Change of working hours			Change in participation	
	Overall share	Overall increase in percent points	All	Women	Men	Women	Men
All couples	2.94	1.13	0.04	0.77	−0.22	0.43	0.04
West	2.52	0.93	0.07	0.88	−0.18	0.45	0.03
East	5.04	2.16	−0.06	0.47	−0.42	0.38	0.08
1st quartile	2.64	1.07	0.12	1.07	−0.18	0.55	0.05
2nd quartile	2.83	1.12	0.04	0.82	−0.22	0.45	0.03
3rd quartile	3.04	1.18	0.04	0.84	−0.24	0.46	0.03
4th quartile	3.44	1.15	−0.06	0.29	−0.25	0.21	0.03
1 child	3.41	1.31	0.02 n.s.	0.74	−0.27	0.43	0.03
More than 1 child	2.67	1.03	0.06	0.78	−0.19	0.43	0.04

1 In the case of the corridor-model, the total increase in families using "Familienarbeitszeit" is from couples from categories other than in the corridor of 28 to 32 hours by definition.
All values statistically significant at least at the 10 percent level (except for values marked with n.s.)

Source: SOEP 2010, 2011, 2012; FiD 2010, 2011, 2012; own calculations.

nues and social security contributions likewise increase. In addition, savings arise in other benefits such as *Kinderzuschlag* (supplementary child allowance), *Arbeitslosengeld II* (an unemployment benefit) and *Wohngeld* (housing benefits). The net costs of *Familienarbeitszeit* are therefore significantly lower than the gross costs and—depending on the variant—amount to 130 to 320 million euros per year.

The corridor model necessitates significantly higher gross costs than does the base model. This is particularly true in the corridor model with wage replacement variant (Table 5, column 2): Here the desire for the lower working hours in the corridor increases, since part of the difference between the three-quarters income and a full-time job's income is being compensated. Because of these incentives and the related behavioral responses, the savings

Table 5

Expected costs of Familienarbeitszeit in million Euro per year
In Millionen Euro pro Jahr

	Variant 1: Wage replacement benefit		Variant 2: Lump-sum benefit	
	Base model	Corridor model	Base model	Corridor model
Expenditures for *Familienarbeitszeit* (gross)	**226.98**	**353.55**	**222.02**	**259.61**
Additional revenues				
Income tax (including solidarity tax)	54.21	4.87	56.86	25.12
Social security contributions	16.88	7.68	16.47	9.02
Savings regarding social transfers				
Kinderzuschlag (in-work credit for families with dependent children)	0.50	3.44	3.24	3.83
Arbeitslosengeld II (social assistance)	10.08	17.05	12.60	16.50
Wohngeld (housing benefit)	1.45	2.40	2.03	2.47
Net costs	**143.86**	**318.11**	**130.82**	**202.67**

Source: SOEP 2010, 2011, 20112; FiD 2010, 2011, 2012; own calculations.

in this scenario are lower and the net costs are comparatively high. These problems do not arise in the corridor model with lump sum variant, and this is reflected in significantly lower gross and net costs (Table 5, column 4).

Generally, a greater utilization of the benefits are possible in the middle- to long-term through a shift in parents' working time preferences and a labor market that better accommodates these time arrangements. These changes in social norms and/or preferences, as well as changes on the part of employers, are not taken into account in this simulation. If, in the medium- to longer-term, significantly more families begin shifting toward the working-hours configurations that qualify for *Familienarbeitszeit*, higher costs can be expected.

Conclusion

While the public funding of childcare facilities plays an important role in facilitating a good work-life balance for women in Germany, fathers must also participate more in childcare and household work. Policy must be shaped to facilitate this: The *Partnerschaftsmonate* in the *Elterngeld* plan, as well as the new regulations in *ElterngeldPlus,* are a first step in this direction. But the concept behind *Familienarbeitszeit* takes it one step further: This benefit only offers financial help to families in which both parents are employed and taking on household work. To be eligible, both parents must be engaged in three-quarters employment. The benefit would also work for single parents.[13]

The calculations show that depending on the variant—that is, the configuration of the benefit and the eligibility requirements—the proportion of families with children aged two to four years in which both parents are engaged in three-quarters employment would rise by nearly two percentage points, up to 2.5 to 3 percent. There is little difference between the variants with a wage replacement and the variants with a lump sum benefit, though households with lower incomes will benefit somewhat more from the latter. In addition, a lump sum benefit creates less of an administrative burden and increases transparency for potential beneficiaries. A lump sum benefit therefore appears to be better suited for implementation.

The comparison of the different variants' eligibility requirements in terms of working time shows that a flexible working-time corridor of 28 to 32 hours per week for each parent reaches more families than does a fixed-working time model in which each parent must work exactly 32 hours. However, the total work volume does not increase in the corridor model.

The fiscal costs involved in all four variants of the *Familienarbeitszeit* are manageable compared to other family-oriented benefits. In the most expensive variant—the corridor model with wage replacement—the net annual costs amount to roughly 320 million euros per year. A variant with a lump sum would limit the costs. When interpreting these results, however, it is important to note that they are only representing short-term effects, because the underlying simulation model cannot reflect changes in social norms and preferences. It is possible, however, that in the medium- to longer-term many more couples will opt for *Familienarbeitszeit*, in which cases the costs would also rise.

13 For results for single parents, see: Müller, Kai-Uwe. Michael Neumann, and Katharina Wrohlich (2015), lc.

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