FAMILY POLICY AND DEMOGRAPHIC EFFECTS: THE CASE OF GERMANY[1]

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ABSTRACT: *In the last decade a remarkable modernisation of German family policy has been initiated. In the meantime the Total Fertility Rate (TFR) has remained persistently low. Some OECD country comparisons highlight the impact of policy measures on fertility levels, but this thesis is challenged by micro-level analyses. Regardless, the causal mechanisms, the institutional setting and the time lag of possible effects still remain under-investigated.*

This paper outlines recent changes in German family policy with a special focus on institutional characteristics and regional heterogeneity. The findings reveal contradictions between the institutional settings of German family policy – characterised by horizontally and vertically split competences – and the bounded rationality characterising fertility decisions. The recent expansion of childcare provision and a new parental leave policy stand in contrast to relics of the past, such as half-day schools and the male-breadwinner oriented tax system. This paper underlines the role of the institutional context, the legitimation of family policies and the interaction of different policy measures. Furthermore, it highlights the process character of changes resulting in remarkable time lags between policies and effects.

As such, studies on the impact of family policy are insufficient if they merely focus on short-term effects or a limited set of policy measures, and the unvarying TFR in Germany does not necessarily contradict the impact thesis. Apart from that, age-specific fertility rates show a dynamic recuperation process. Both the time-lag thesis and the broader policy context have implications for future research on the nexus of family policy and fertility.

1 IMPROVING FAMILY POLICY AND FLAT-RATE TFR IN GERMANY

The difference in fertility levels in Europe and OECD countries is quite high. In 2008, the period fertility rate ranged between 2.18 in New Zealand (highest) and 1.19 in South Korea (lowest), with a mean of 1.71 for the entire OECD (OECD 2011). In Europe, the variance is similarly remarkable, with 2.14 in Iceland (highest) and 1.32 in the Slovak Republic (lowest). This inter-

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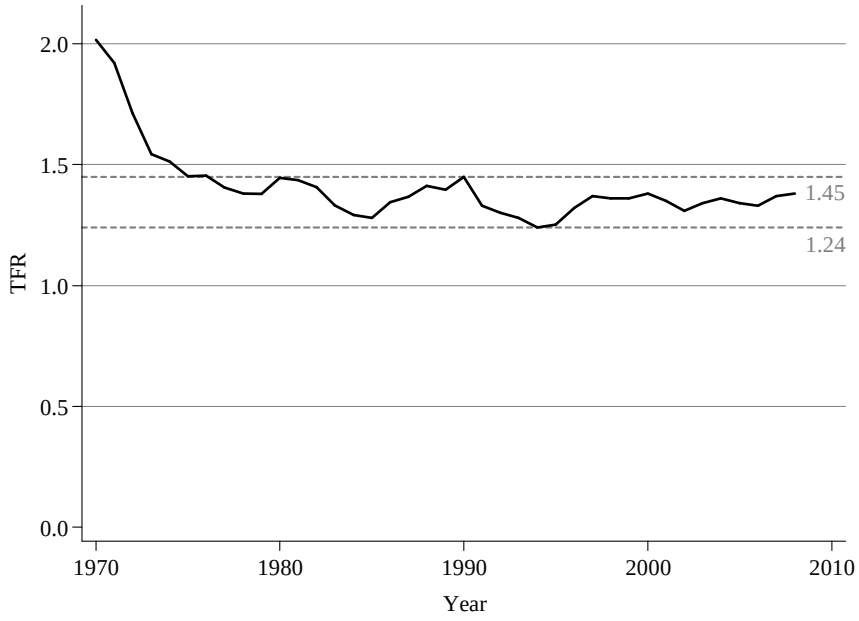
national variance, which is based on comparison of national-level indicators, has mainly been explained by the role of family policy and the labour market (Castles 2003; Bujard 2011a; Luci and Thévenon 2012). Whether there are any (positive) effects of different family policies on fertility at the macro level is still controversial (Adserà 2004; d'Addio and d'Ercole 2005; Gauthier and Hatzius 1997; Sleebos 2003, for an overview see Gauthier 2007). Additionally, the impact thesis is challenged by some micro analyses (e.g. Neyer and Anderson 2008; Spieß 2012). Within European regions there are similar patterns of both economic–institutional contexts and fertility ideals (Gauthier and Philipov 2008). Summarising the research of TFR determinants in OECD country comparisons, structural factors like economic performance and policy measures seem to have a strong impact on different countries' fertility levels, although the causal impact still remains under-investigated.

Against this background, the German case is particularly interesting. During the past few years there has been considerable change in both family policy and the labour market. Considering childcare policies until the beginning of the twenty-first century, Germany was way behind most other OECD countries, but started to catch up in a remarkable manner in the last eight years initiated by the "Tagesbetreuungsausbaugesetz" [law of day-care expansion, abbr.: TAG] (Deutscher Bundestag 2004) and the "Kinderförderungsgesetz" [law of child support, abbr.: KiföG] (Deutscher Bundestag 2008). The rate of childcare enrolment doubled within five years and reached 23.1 per cent in March 2010 (Statistisches Bundesamt 2010), which corresponds to 472,000 children of less than three years of age in German day-care. Furthermore, the TAG guarantees day-care for all children of one year of age or older starting in 2013 – the goal is a rate of 35 per cent until 2013. In 2006 the "Bundeselterngeld- und Elternzeitgesetz" [federal law of parental leave benefit and parental leave, abbr.: BEEG] (Deutscher Bundestag 2006) introduced an income-related parental leave benefit in Germany of up to EUR 1,800 net a month for 14 months, with two months of exclusive *paternity* leave. Furthermore, this policy expansion was accompanied by a substantial drop in unemployment: from 8.2 per cent in January 2000 to 6.6 per cent in December 2010, while the EU27 mean rose from 9.0 to 9.5 per cent during the same period (Eurostat 2011).

However, these two major paradigm changes in German time and infrastructure policy have been accompanied by stagnant fertility rates. Since 1975, the German TFR has sat tightly between 1.24 and 1.45, as can be seen in Figure I (with exception of the GDR, which is not considered here).[3] Between 1996

[3] This article refers to the Federal Republic of Germany, which contains the former West Germany until 1990 and the Unified Germany since 1990. This implies a continuity of analysed institutions and goes in-line with OECD databases. If a differentiation between East and West Germany after unification is reasonable, it will be specified as regarding childcare in Section 3.2, or in order to allow for long-term comparison of income as in Figure IV.

and 2009 the range is even narrower, with rates between 1.321 and 1.384. The cohort fertility rate until the age of 40 shows a continuous drop from 1.637 for the 1959 cohort down to 1.446 for the 1969 cohort (Human Fertility Database 2011).



Source: OECD 2010c.

Figure I
The horizontal TFR line in the Federal Republic of Germany

Does this contrast of dynamically changing family policy and stable fertility challenge the policy impact thesis? Following recent changes of policy, why cannot we observe a demographic effect? Is Germany a special case? Were policies chosen improperly? Or, is more time required for the onset of effects?

This paper gives an in-depth description of the main characteristics of German family policy in an international comparison, in which continuities, changes and inconsistencies of the welfare state model are highlighted. The emphasis is on the institutional setting, which plays an important role in this context, although it is rarely considered in fertility research. An additional focus is on the time lags between policy change and effects on fertility, which can be explained by the bounded rationality of fertility behaviour. Furthermore, family policy is illuminated in the context of economic change over the last decades and the characteristic German discussion about the demographic le-

gitimisation of family policy. The deflections of these crucial points for understanding the policy–fertility nexus in Germany aim to give some new insights which are relevant to quantitative macro-level research in international comparison.

2 THE MAIN INSTITUTIONAL CHARACTERISTICS OF GERMAN FAMILY POLICY

Before taking a look at specific family policies, it is worth analysing the institutional setting. This is characterised by a complicated mix of horizontal and vertical competences. Germany is a federal state with 16 "Bundesländer" (states), which play an important role in the implementation of family policy (see also Bonoli 2008 for Switzerland). In several cases the competence for policies is split between the federal and state level and sometimes even the regional level is involved. For some benefits, such as alimony credit and tax benefit for childcare, the competence is split between all three levels. For instance, the financing of child allowances ("Kindergeld"), student loans ("BAföG") and parental leave is organised by both the federal and state level. However, for some infrastructure policies, such as childcare and schools[4], the federal level has not had any competence since the latest reform of federalism in 2006.

It is extremely helpful to analyse family policy using the "time, infrastructure and money" framework for two reasons, and this has been common in German political and scientific discourse since the Seventh Report on Family by the German Ministry for Family, Senior Citizens, Women and Youth of 2006 (BMFSFJ 2006; Bertram et al. 2005). Firstly, it takes up the perspective of the family. In contrast to the OECD typology of leave schemes, education and care, family benefits and employment policies (e.g. Lohmann et al. 2009), which adopts the institutional perspective, the family perspective is useful for analysing fertility decisions, as it considers the broader policy framework. Secondly, "the time, infrastructure and money" framework is more general and therefore open to some policies which are not considered in the common frameworks. Examples of this include family law such as right of access, health policy like the non-smokers protection act[5], health insurance or mother–child

[4] The competence for schools is relevant for family policy because in Germany most schools are only half-day schools without lunch, which is an obstacle to mothers participating in the labour market.

[5] The non-smokers protection act allows families to be in public places – such as in restaurants, cafes, trains or official buildings – without children having to experience passive smoking.

convalescent care, housing policy for families, education vouchers and family centres.

Following this broader framework of family policy, the extent of the split of competences becomes even more obvious. This is apparent not only at the vertical level of federal, state and regional actors, but also at the horizontal level. The competence of the 149 social benefits of German family policy is divided between different departments (Bujard 2011b).[6] For 24 of them, the competence lies with the Ministry for Family, Senior Citizens, Women and Youth; for 51, it lies with the Federal Ministry of Labour and Social Affairs; for 23, it lies with the Federal Ministry of Finance; for 21, it lies with the Federal Ministry of Health; for 15, it lies with the Federal Ministry of Education and Research and for eight each with the Ministry for Regional Planning, Building and Urban Development and the Federal Ministry of the Interior. This institutional fragmentation is a key characteristic of German family policy and it clearly complicates development of a coherent family policy.

Looking at institutions in the context of an international comparison, there are further factors that are relevant for understanding different fertility levels, for example, the tradition of women's right to vote and to stand in elections, the proportion of women in parliament, political rights, the number of veto players, the influence of the constitutional court, the party system, public-sector employment and labour relations. The collapse of economic and political institutions is a factor that is especially relevant for Eastern European countries. In addition, historic cultural institutions also play an important role in the policy–fertility nexus, especially the Catholic (or Protestant) tradition, which correlates significantly negative (positive) with the TFR and the childcare enrolment rate. Germany is characterised equally by both traditions: 30.5 per cent are Roman Catholic, 29.5 per cent are Protestant and 35 per cent are undenominational.

An important – though frequently overlooked – historical factor is the abuse of family policy for natalistic reasons by fascist regimes. These perfidious and racist policies towards families, encouraging births only for military reasons, still cast a cloud over German family policy, even if encouragement of births is socially legitimated today. This historical abuse factor as a determinant of fertility is also an influencing factor in other countries with a fascist history: Spain, Portugal, Italy, Japan, Germany and Austria all have period fertility rates as low as 1.3 or 1.4. Family policies encouraging the birth of a third or fourth child would therefore be expected to have a lower effect than in other countries, such as France, Sweden or the USA.

[6] This horizontal fragmentation is not inconvenient compared to other welfare states, but the high amount of family related benefits is.

3 RECENT CHANGES IN FAMILY POLICY: TIME, INFRASTRUCTURE AND MONEY IN INTERNATIONAL COMPARISON

Global indicators are not particularly suitable for showing changes in German family policy. According to the OECD, German expenditure on family policies adds up to three per cent of GDP. However, the financial tableau of the German Ministry for Family, Senior Citizens, Women and Youth calculated EUR 114.8 billion for 2008 (BMFSFJ 2010), which adds up to 4.6 per cent of GDP.[7] With a broad definition (including public expenditure related to wedlock etc.) the share reaches 7.5 per cent of GDP. However, the change of German family policy can be described as a shift from a predominantly transfer-focused policy to rather more infrastructure- and time-focused policies.[8] These new policies are dedicated to paving the way for reconciliation of work and care, especially for parents of children of one or two years of age. These changes can be interpreted as a life-course policy and are both cause and effect of changing family norms.

3.1 Time Policy: Path Change

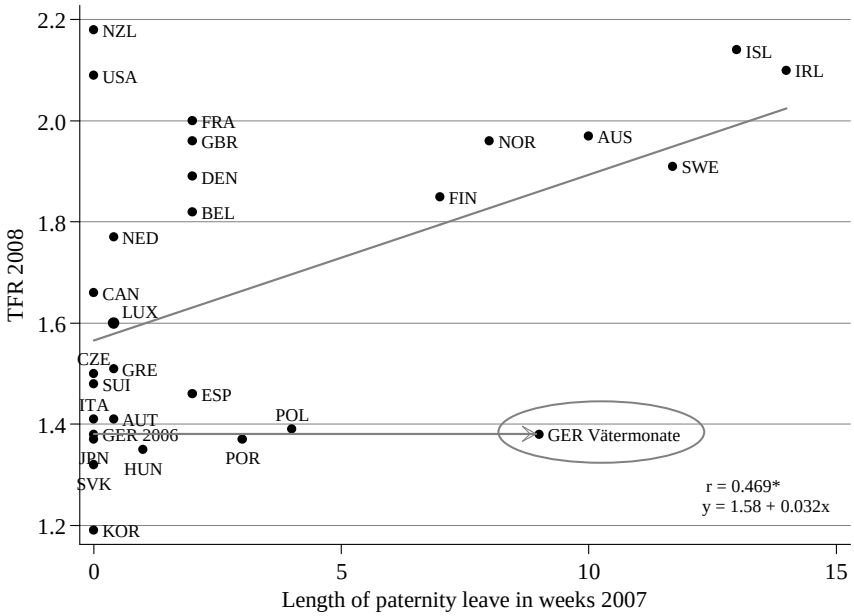
As a result of the BEEG, parents in Germany have received an income-related parental leave benefit for 14 months after birth since the first of January 2007. It is designed for both partners and supports parenthood during the period when intensive care is necessary. The idea of this policy follows the Seventh Report on Family (BMFSFJ 2006), which underlined equality of work and care in society. The conditions for this parental leave benefit are that the parent takes care of the child him/herself and may at the same time work up to 30 hours a week. Its minimum is EUR 300; with a previous net income of up to EUR 1,200 the amount is 67 per cent, and with a previous income of up to EUR 2,769 the amount is 65 per cent. Parents with a previous income of between EUR 2,769 and EUR 500,000 receive the maximum of EUR 1,800 parental leave benefit each month. Additionally, there is a bonus of ten per cent or a minimum of EUR 75 for each additional child. While the former parental leave policy, the "Bundeserziehungsgeld", was set at EUR 300 a month for two years – or alternatively EUR 450 a month for one year –, the new parental leave benefit is far more generous and at the same time promotes job re-entry after

[7]Differences between the indicators used by the OECD and BMFSFJ are significant. Both take into account tax benefits, but the OECD does not take into account social security benefits and some other financial benefits.

[8]See Thévenon (2011) for an international comparison of family policies and recent changes.

one year.[9] This higher rate of compensation for families with children younger than 14 months is accompanied by an expansion of childcare facilities (see Section 3.2).

A specific component of parental leave, aiming at gender equality, is the regulation that one partner can only use 12 of the 14 months. *De facto*, this means a minimum of two months paternity leave, which encourages fathers to take at least two months of the income-related leave so that this offer does not expire. In Germany the term "Vätermonate" ('months for fathers') has been established for this particular regulation. Figure II illustrates that this German paternity leave is comparable in terms of length with other Northern European countries. Compared with the OECD 28, Germany's new paternity leave stands out amongst the continental Western European family of nations (Castles 1993; Schmidt 1993).



Source: BMFSFJ 2006, OECD 2010a, 2010c.

Figure II
Length of paternity leave in OECD countries

[9] The expenditure of the former parental leave policy was EUR 2.8 billion in 2006, and the expenditure of the parental leave benefit introduced in 2007 was EUR 4.2 billion in 2008.

Unpaid parental leave lasts up to three years, of which 12 months can be used up until the eighth birthday of the child. In the first three years there is also employment dismissal protection for parents. Furthermore, there are four important time policies in Germany: (1) some German states pay additional parental leave benefits on top of the federal leave benefits; (2) Germany has a maternity leave of a duration of 14 weeks; (3) since 2001 parents and non-parents have an entitlement to part-time work; (4) the public old-age pension insurance accounts for parenthood of children born after 1991 in the same way as the amount of three years average contribution. Additionally, this insurance upgrades low contributions of parents up to the average so long as children are younger than ten years old (but only for the caring parent, which is usually the mother).[10]

3.2 Infrastructure Policy: Path Change and Regional Heterogeneity

For decades there was a rudimentary day-care infrastructure in West Germany for children younger than three years of age and a universal half-day system of *kindergarten* and school. Most schools only held classes from 08:00 to 13:00. In contrast, in the GDR up until 1990 and in East Germany after German unification there was a well-developed day-care infrastructure. The reconcilability of work and family was prevented in West Germany because of a lack of childcare; on the contrary, in East Germany families faced a lack of jobs.

Since the beginning of the twenty-first century, the German federal government has initiated an ambitious extension of childcare policy. This vast policy change was supported by coalitions led by the Social Democrats (1998–2005) and Christian Democrats (since 2005). Milestones of this policy were the laws TAG and KiföG. The quotient of childcare offered by day-care centres and the number of children younger than three years of age was 8.6 per cent on 31 December 2002 (without day child-minders; Statistisches Bundesamt 2011a). The data about child placement including day-care centres and child-minders, which are available since 2006, show a rapid increase from 13.6 per cent in 2006 to 15.5 per cent in 2007, 17.8 per cent in 2008 and 20.4 per cent in 2009, and reaching 23.1 per cent in 2010 (Statistisches Bundesamt 2010, 2011b). Furthermore, the KiföG guarantees childcare places for children older than 12 months beginning from 2013 and the rate for 0–2 years is expected to be around 35 per cent in 2013.

In 2003 an investment programme was established called “Zukunft, Bildung und Betreuung” [Future, education and care, abbr.: IZBB] to start transforming

[10] Some policies categorised as time (or infrastructure) policies can also be categorised as financial transfers.

the half-day school system into a full-time school system. This programme demonstrates German federalism very well, as the federal government invested EUR 4 billion in the development of full-time schools while the competence for schools lies at the German states level. Between 2003 and 2007, 7,200 schools benefitted from this programme. The full-time school rate rose: in 2008 1.93 million primary or secondary school students attended a full-time school, which corresponds with a rate of 24.1 per cent.

In Germany the availability, cost and quality of day-care and school infrastructure differs across states and municipalities. Differences between states are vast. In 2009, after years of extension, the level of childcare enrolment in the Eastern German states was comparable to the Scandinavian level (35–55 per cent), while in North Rhine-Westphalia it was still at 8.7 per cent. A similar variance can be found when looking at full-time schools: in Bavaria only 4.7 per cent of primary or secondary school students can visit full-time schools. On the contrary, the rate in Saxony at 69.3 per cent is 15 times higher. This heterogeneity of German family infrastructure shows impressively that in federal countries mean national-level values can be misleading. This is relevant for OECD comparisons, because childcare enrolment is one of the main determinants of fertility comparisons across OECD countries; not only in correlations ($r = 0.71$ in 2006), but also in terms of cross-sectional regressions (Castles 2003, 224; d'Addio and d'Ercole 2005, 61) and changing rate regressions (Bujard 2011a, 351). But even *within* states there are considerable differences in infrastructure supply, for example, the regional rate of childcare for children under three years of age in Baden-Wuerttemberg ranges from between nine per cent in rural districts to 36 per cent in Heidelberg (Statistische Ämter 2010).

As a matter of course, the broad concept of "family infrastructure" covers other policies (see Bertram and Bujard 2012), such as educational grants, housing policies, educational support for parents according to the Social Security Code (SGB) and health policies concerning free insurance for children and preventive medical check-ups. However, the crucial policy change began by establishing childcare and full-time school infrastructure – Germany is halfway there. In some regions parents and potential parents can already rely on such infrastructure in order to combine work and family. Nevertheless, in some regions this is still not the case.

3.3 Financial Transfer Policy: Continuity and Relics of the Past

While in Germany time and infrastructure policies have emerged as considerable areas of policy change over the past years, family allowances have shown an incremental increase over the past decades. Child allowances were increased relatively often. In 2010, the allowance was EUR 184 each month for the first and second child, EUR 190 for the third and EUR 215 for each subsequent child. It is paid at least until the age of 18. For students, it is even paid until the age of 25. In 2008 it equalled EUR 33.4 billion. There are many further financial rules covering public servants with children, means-tested social security, and benefits for single parents and housing support. It is noticeable that German transfer policy for families focuses mainly on the tax system. As an alternative to direct child allowances, parents can choose a tax exemption for dependent children of EUR 7,008, which is higher than direct allowances for parents with high tax progression. A remarkable relic of the male-bread-winner model is "Ehegattensplitting", tax splitting for married couples. This tax grant reduces taxes for married couples irrespective of them having children and is especially helpful for couples with only one income. Even though the costs of this instrument are relatively high, with an expenditure of EUR 20 billion, its abolition would not lead to a public saving of this sum because an alternative personal allowance would have to be developed. Considering the tax system in analysing German transfer policy is necessary for two reasons:

- The international comparison of financial benefits for families, as conducted by the OECD, could be misleading. Without tax savings, Germany is in the OECD average with 1.43 per cent of GDP. With tax savings, it is in the top flight: 60 per cent higher at 2.3 per cent of GDP in 2005. Only eight out of 28 OECD countries have comparable tax saving components of family policy (OECD 2010a, 2010b).
- The tax system encourages specific lifestyles and family decisions. German tax splitting for married couples encourages the male bread-winner/female carer family model. The increasing proportion of couples remaining unmarried in the egalitarian Eastern German states can be interpreted as a reaction to old-fashioned German marriage taxation. This "Ehegattensplitting" is completely unsuited to the changes in time and infrastructure policy mentioned above.

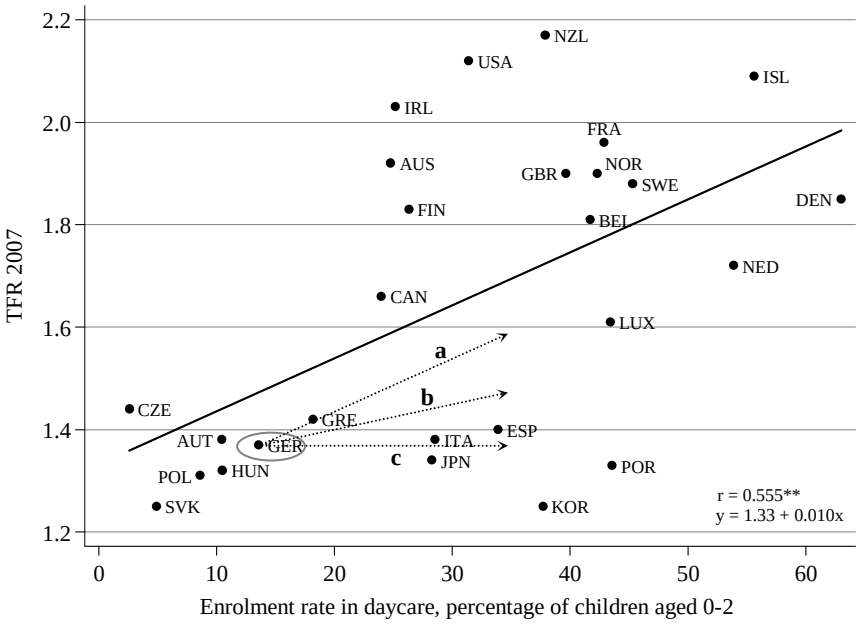
4 THE CONTEXT OF THE POLICY–FERTILITY NEXUS: TIME LAGS, ECONOMIC CHANGE AND RECUPERATION

4.1 Time Lags between Policy and Changes of Fertility

Should Mario Draghi, President of the European Central Bank (ECB), announce that the ECB is changing the key interest rate, one may expect business investments, private consumption and the financial market to react in a particular way over the following next few months. However, such a specific pattern of reaction cannot be expected from family policy, because there is not just one 'adjustment screw to turn', and the decision to have a child is not only a question of financial resources and employment, but also a dyadic one of life course and devotion.

Looking at the significant correlation of 0.555 between childcare enrolment and the TFR in Figure III, the majority of countries is close to the regression line. Of course, childcare is only one of several determinants of fertility, but its influence on cross-sectional regressions (see above) raises the question of a possible TFR response to increased childcare.

Which development will the German fertility rate have taken by 2013, when the 35 per cent rate of child placement is realised? Will it follow the gradient of .01x, which would be an increase of 0.22, an increase of the TFR from 1.38 in 2007 to 1.60 in 2013 (arrow a)? Will the German fertility rate stay at the same level, as it did for decades (c)? Or will it be in between (b)? These questions are very important, both for science and politics. Assuming that there is an effect, we have to think about time lags, and there are theoretical and empirical considerations to this matter.



Source: OECD 2010a, 2010c.

Figure III
The ambitious catch-up of German day-care policy

Policy changes, such as the ones described in Germany, can have an impact when potential parents interpret their constellation differently, for example: "If I decide to have a baby, I can go back to my job after one year", or "If I decide to have another baby, there is no risk of becoming poor". It is not a specific rate of an indicator that is relevant for fertility, but the appraisal of the economic situation for families and the compatibility of family and career. There is a time lag both in information and in norms. It might take a few years until the appraisal becomes common, that parents find a childcare place if they need one. The reason lies in the bounded rationality and the reduced information costs of fertility decisions, which can be explained by the Frame-Selection Model (Esser 2004) that differentiates decisions an actor may make in terms of its reflective rational frame and less reflective automatic frame. While the reflective rational mode needs elaborate information processing, the automatic frame relies on norms and scripts. Hence, people usually do not prepare an in-depth analysis of family policy and the labour market in their region before deciding to have a baby. They rely instead on norms or narratives of neighbours and

friends – which may be based on older constellations. The time lag concerning norms throws a spotlight on the mismatch of gender and generations: for most young women in Germany, both motherhood and a career are central parts of their future biography (Allmendinger 2009). In contrast, some men and a part of the older generation implicitly or explicitly expect mothers to step out of the labour market for a longer period of time and to withdraw previous job ambitions following childbirth. Possibly, the time lag of norms and information becomes larger the longer the incoherence between expected life plans of young women and family policy exists (see McDonald 2002).

Furthermore, for the intended change in patterns of fertility decisions throughout the life course, family policy has to be consistent and reliable. While the combination of the income-related parental leave benefit of 14 months and the new childcare policy is consistent, German taxation and adherence to half-day schools in some states do not go hand in hand with the change in policy.

This theoretical argument can be illuminated empirically: while a cross-sectional comparison shows a highly significant association between rates of childcare and fertility, the important question of time lags remains. For this, methodologically, the *changing rates* of childcare (enrolment or public expenditure) have to be compared with *changing rates* of fertility. For time lags of one or two years, the effects are small. However, for periods of five to ten years, the effects are significant. For 26 OECD countries, the correlation of changing rates of childcare expenses 1985–1995 with the TFR changing rates 1986–1996[11] is 0.558 and for the subsequent decade (1996–2006) 0.517. For the 20-year period, the effect is even higher with a Pearson's r of 0.727.[12] All three associations can be proven with multiple regressions of changing rates (Bujard 2011a). Analyses about time lags concerning the impact of childcare policy on fertility suggest that it can take five to ten years and that the effect is strongest when considering the two decades together. One of the rare empirical analyses of time lags of policy impact on fertility was carried out by Luci and Thévenon using one, three and five-year lags with pooled time series regressions. They found that longer lags increased the goodness of fit of their 2SLS model (Luci and Thévenon 2012, 28). Empirical knowledge about time lags is, however, still limited, not least due to methodological difficulties. However, there are theoretical and some empirical reasons to remain patient regarding the

[11] The operationalisation uses a time period of one year between determinants and the TFR, because the decision to have a child is ca. one year before birth (i.e. time between decision, conception and birth).

[12] The indicator "enrolment rate" has several advantages compared to the indicator "childcare expenses", because the latter can be influenced by different sizes of generations. However, the data only allows use of the indicator childcare expenses for changes in this long time period.

effects of family policy on fertility. The longer the policy is reluctant to react to societal change, the longer the time lag is – this being due to cultural norms having adapted to the old model of family policy. Hence, in Germany, more patience is required.

4.2 The Race between Economic Change and Policy Reaction

When analysing the impact of policies, we have to consider that non-policy determinants are also dynamic. Therefore, impact studies depend on theories about reasons for the birth decline in OECD countries since the end of the 1960s. There are various theories with different disciplinary perspectives which highlight cultural norms (van de Kaa 1987; Lesthaeghe 2010), micro-economic decisions (Becker 1991), gender equity (McDonald 2000), female emancipation (Esping-Andersen 2009), technology (Murphy 1993), biographic options (Birg et al. 1991), the level of development (Myrskylä, Kohler and Billari 2009) and structural changes (Castles 2003; see also Lesthaeghe 1995).

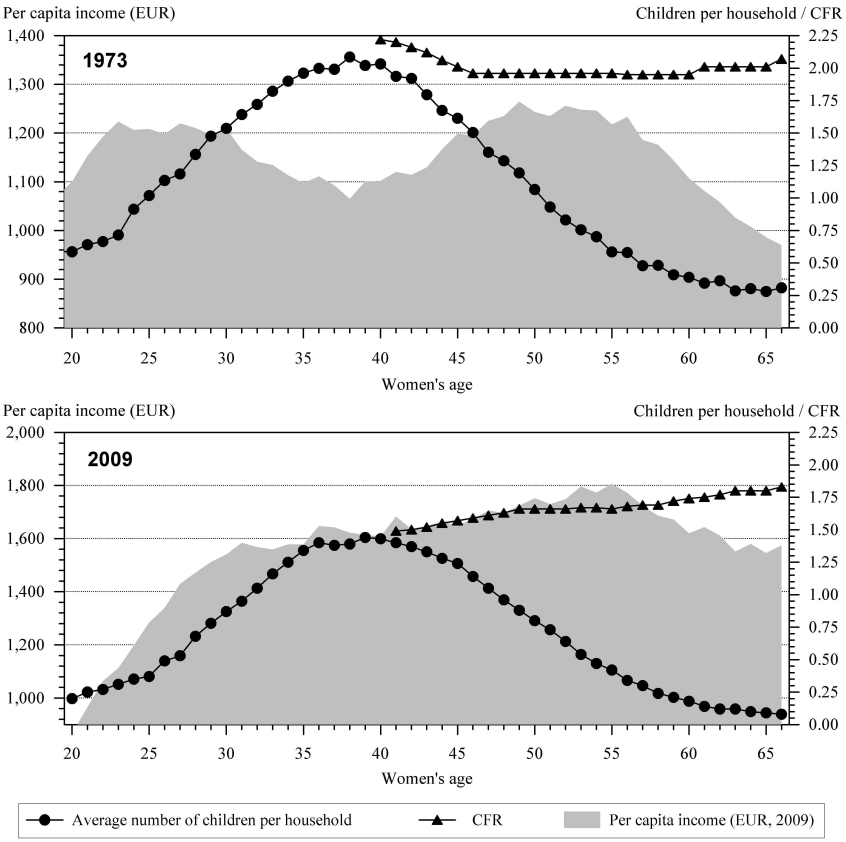
Some arguments concerning these theories can be recombined into a two-stage theory of diffusion and adaptation (Bujard 2011a). At the macro level, the beginning of the second birth decline can be explained by the onset of economic modernisation and female emancipation, the initial factors being the contraceptive revolution and the debate about overpopulation. Additionally, in some countries there were inhibiting factors to this process, such as Catholicism and low political rights. These developments spread through the highly industrialised countries and their inhabitants. At the micro level, these developments affected the rise of opportunity costs for women to work, and biographical options in partnership, the labour market and leisure time. The contraceptive pill allowed for exact planning of childbirth and had an influence on dyadic decisions. Changing norms accompanied the dynamic pattern of economic, technological and societal changes so that sexual relationships without marriage and the delay (or absence) of parenthood became socially accepted. In the 1970s, the TFR was lowest in countries with a modern economy, high levels of female labour market participation and free access to modern contraception.

In the 1980s, the relationship between the developments described above and some other determinants of fertility changed in a systematic way (Ahn and Mira 2002; Castles 2003). The peak was in 1986. In the 1990s, and still today, the TFR is highest in countries with a strong service sector and generous family policy, but also high GDP per capita, a low unemployment rate, certain migrant groups, and high levels of Protestantism. Historical experience with natalistic misuse also plays a role. While the country differences of TFRs during the second birth decline of 1965 to 1985 can be interpreted by different diffusion

tempi, the high variance in the last decades can be explained by differing political and societal adaptations. The relationship between diffusion and adaptation in each country is a main determinant of the development of fertility rates. Certainly in Germany, the dynamic of the diffusion process today is lower than it was in around 1970. However, the modernisation of the economy (which puts pressure on education, mobility and flexibility) carries on. The younger generation may expect to face later entry into a career and more insecure jobs. Supposedly, without changes to family policy (adaptation), fertility rates could have dropped even further over the last few decades. Hence, the effect of family policy – but also societal and economic adaptation to family needs and female emancipation – has to be stronger than the effect of diffusion and further economic modernisation. Both powers are effective across time and influence fertility rates as well as the life planning of younger generations. It is comparable with a chase: the tempo, intensity and how family policy reacts to these economic and societal changes systematically is fundamental.

This argument can be demonstrated by the interaction of family policy, women's labour force participation and fertility. At the macro level, the nexus between women's labour force participation and fertility has turned from a negative into a positive correlation (Ahn and Mira 2002). Thévenon (2009) shows that in countries such as Germany, with limited work–life balance policies, the increase of women's labour force participation is accompanied by an increase of childless women. Family policy is the invisible hand for the changing signs of these correlations. In the diffusion phase, factors, such as increased GDP per capita, and the availability of modern contraceptives simultaneously had a positive correlation with women's labour force participation and a negative one with the TFR. Since the 1980s, childcare expenses per capita have grown (OECD 2010b), and they have had a positive correlation with both TFR and women's labour force participation.[13] Multivariate regressions and changing rate analyses (see above) confirm the argument that family policy is the invisible hand behind the changing relationship between women's labour force participation and TFR.

[13] In 1971 the correlation between GDP per capita and TFR for 23 OECD countries was -0.43; the correlation between GDP per capita and women's labour force participation was 0.33. In 2006, the correlation between childcare expenses per capita and TFR for 28 OECD countries was 0.66; the correlation between childcare expanses per capita and women's labour force participation was 0.58 (Bujard 2011a).



Source: German Microcensus 1973, 2009 (scientific use files), author's calculations.
Note: the per capita income is inflation adjusted (in EUR, basis 2009) and weighted by the new OECD scale. The difference between the lines of both CFS and average number of children per household is due to empty nesters.

Figure IV
Income and living with children in life course: West Germany 1973 and 2009

For Germany, the changed constellation for families can be demonstrated well by Microcensus data. Figure IV shows that in a life-course perspective the household income of women between 20 and 35 years of age dropped dramatically between 1973 and 2009. In the biological time slot of high fecundity, average income was lowest. The contrast of the "two-humped camel pattern" of 1973 and the pattern seen in 2009 is enormous. Although a part of this shift is

due to higher age at marriage in 2009[14], these data show the powerful shifts in income across the life course as a result of extensive economic changes over the last few decades. Furthermore, it underlines that it is not only the reconcilability of work and care which can be helped by childcare and leave policies, but that economic factors are also at play. Therefore, the generational distribution of income is disadvantageous for the younger generation.

4.3 Recuperation Process Underlying the Flat-rate TFR

After having looked at time lags in Section 4.1, and some independent variables in Section 4.2, it is helpful to focus on the dependent variable. There is not only a hidden regional variance within steady TFR rates, but also different parity patterns between Eastern and Western Germany. In Western Germany, the childless rate at 21 per cent is high, and with 38 per cent two children is the most frequent family form. On the contrary, in Eastern Germany, the one-child family is widespread (Statistisches Bundesamt 2009).

The recuperation process is especially interesting concerning future developments (Prskawetz et al. 2011). The TFR has been stable in Western (West) Germany for decades, as simultaneously the births for women at the age of 30 years and younger dropped from 734 per thousand in 2001 to 580 in 2009, and the births for women older than 30 rose from 648 to 772. Even more striking are changes of age-specific birth rates for 44 to 49 year old women; in nine years it nearly doubled from 34 to 54 births (per thousand). This pattern is even clearer in Eastern Germany, where the age-specific birth rate of 35 to 39 year old women doubled from 96 in 2001 to 201 in 2009, and the rate of 40 to 49 year old women with 36 births was more than twice the rate of 2001 (Bertram et al. 2011).

These age-specific data show that there is a fertility dynamic hidden by the broad indicator TFR. This might throw new light on the effects of the generous parental leave benefit that was introduced in January 2007 (and announced in 2006), if we take into account that this policy particularly affects the older cohorts: in Western Germany, the increase of the age-specific birth rate (per thousand) for 35 to 39 year-old women from 2001 to 2006 was around 7 each year (7, 7, 10, 4 and 6); in the following years after the newly-introduced parental leave benefit it increased to 17 and 11. In Eastern Germany, there was also an acceleration of age-specific birth rates in this age group from 148 to 201 between 2006 and 2009. Of course, this recuperation phenomenon is a general trend in OECD countries, but the age-specific birth rates suggest the possibility

[14] The household income of married women is higher due to the income of husbands as well as the reduced denominator for additional household members in the OECD scale. For higher age at marriage in Germany see Grünheid (2011).

that the parental leave policy has boosted the recuperation process. Additionally, the argument shows that a stable TFR does not mean that there is no effect of policy intervention. And how would the TFR have developed without recent changes in family policy?

5 ACTUALLY, MUST FAMILY POLICY LEGITIMATION BE DEMOGRAPHIC?

Having shed light on fertility, family policy and possible effects for Germany, one general argument is to draw on the perspective of a political scientist: the legitimisation of family policy is not only based on demographic goals. In German family policy laws this goal is not even explicitly stated. Rather, since competence is shared by several different departments (see Section 2) there are a series of different policy goals, which can be pursued by family policy.

Figure V demonstrates a matrix between instruments and goals, in which the check marks indicate possible effects. There are individual goals, concerning the well-being of children and parents (Bradshaw et al. 2006; Bertram and Spieß 2012), and societal goals. Even if the discourse on family policy and its effects often cover demographic externalities, it has to be stressed that this is not the main goal of the government and the experts of the Seventh Report on the Family. From a normative perspective, there should be a hierarchy of goals, with children's well-being at the top. Irrespective of goal hierarchies, this is a 'win-win' situation, because the means to reach these goals are complementary. Swedish family policy was legitimised primarily by gender equality, the Anglo-Saxon one mostly by avoiding poverty, the German childcare policy by education and French family policy by demographic goals. Of course, there are usually mixed motives, but the effects are similarly independent – whether intentional or not.

	Child well-being		Parental well-being			Societal goals	
	Education and qualification	Health, safety and time	Avoiding poverty	Gender equality	Labour force participation	Fertility	Family norms
Pension claims parents			✓				✓
Child allowances			✓			✓	
Health security (free)		✓	✓				
Parental leave	✓	✓	✓	✓	✓	✓	✓
Paternity leave		✓		✓	✓		✓
Child care	✓	✓	✓	✓	✓	✓	✓
School hours: half day or full day	✓		✓	✓	✓	✓	✓
Regional infrastructure		✓					
Part-time work		✓		✓	✓	✓	
Job guarantee for mothers				✓	✓		✓
Divorce and alimony laws		✓	✓	✓	✓		✓
Taxation of second earner				✓	✓		✓
Special policy for third or fourth child			✓			✓	✓
Addressing	Children	Children	Parents and children	Parents	Parents and economy	Society	Society

Source: Bujard 2011a, 372.

Figure V
Instruments and goals of family policy

The complementary goal structure offers chances for policy makers, because they can form coalitions for family policy with different groups: social policy, business, feminists, educators, and pensioners. But there is one hazard: when family policy is legitimised solely on the basis of its potential to raise fertility, a non-effect – or late effects – could challenge specific policies which have a positive effect on other, non-demographic goals. This discussion came up in the German public a year after the introduction of the new parental leave benefit, which was a disservice to family policy advocates.

6 SUMMARY

This analysis highlights some contradictions between German family policy and its institutional setting on the one hand, and the individual perspective and the bounded rationality of fertility decisions on the other. The crucial point in terms of positive impact of family policy on fertility is the need of the family for time, infrastructure and money – in contrast to the widespread split of competences of different departments and different levels of government. Germany has undergone comprehensive changes in family policies within the last few years, though the fertility rate remains very low.

The question of the policy impact on fertility is disputed between researchers and at the same time the political relevance of this question is very high. Those researchers who conduct their analyses based on macro-level data can provide arguments about the impacts of policies. Accordingly, German family policy reforms should have led to an increase of TFR. However, the case of Germany challenges such a hypothesis. The massive expansion of childcare and the new income-related parental leave benefit are elements of a modern policy. However, young families face some contradictory and interfering relics of the past like male-breadwinner-orientated tax splitting for married couples and the still-prevalent system of half-day schools. German family policy is halfway there, in terms of accommodating the preferences of the younger generation and economic circumstances. But for demographic effects to be seen it has to be reliable and consistent from the perspective of potential parents.

Empirical data and theoretical arguments emphasise that there is a time lag of several years between policy and effect. To understand these time lags a profound theoretical basis is as much needed as the quantitative operationalisation of lagged dependent variables. The latter being the case, because policy effects can only be understood if we have an explanation for the whole phenomenon of the second birth decline. In fact, policy is even part of this phenomenon, which can be interpreted under a broad perspective as a race between diffusion of modernisation and both political and societal adaptation. Analyses of policy impact must take a broad perspective in terms of time and different determinants. Furthermore, we can see fertility changes hidden behind the indicator TFR, for instance age-specific birth rates which have shown an astonishing level of recuperation in the last ten years.

Finally, the German case does not contradict the thesis of policy effects on fertility completely. In fact, it illustrates contextual factors of policy impact, in particular institutions, time and bounded rationality. If German society is patient enough, and if German politicians have the endurance to continue reforms towards a coherent modern family policy which meet the needs of young generations, then demographic effects could become apparent in the next one or two decades. Here, we are talking about fundamental social policy reform.

However, many more determinants beyond policies and the economy matter, especially the historically shaped cultural and institutional heritage. At the same time, family policy has many important goals other than raising fertility.

Further research regarding the effects of family policy and fertility is necessary. Such research should consider both TFR and recuperation measurements as dependent variables, as well as the institutional setting as independent variables besides policy, economic and cultural factors. Because knowledge about time lags between policy change and effects on fertility is limited, future research should give special attention to time lags.

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