

# CARE, HUMAN CAPITAL, AND DEMOGRAPHIC TRANSFORMATION

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TIME FOR CHILDREN, THE SECOND DEMOGRAPHIC TRANSITION, AND PLURAL MODERNITY

The development of the human capital of a society depends on whether the young adults decide for children and are willing to invest time, money, personal relationships, and ties or personal care in the children. For the child's language acquisition and cognitive development, its achievement orientation, as well as its values and attitudes towards other people, institutions, and the state are decisively influenced in the parents' house. The development of the child's self-confidence as a prerequisite for the autonomous development of its personality is possible only if the child can develop a firm and close personal attachment to (at least) one adult, which also persists when the child makes mistakes (Noddings 2010; Rawls 2006; Shonkoff and Phillips 2000).

According to numerous research results (Grusec and Hastings 2007; MacDonald 1997), these development processes are promoted very differently in the parental home, and so children must interact with other children for their effective development. Therefore, it is of great advantage for the child's development to promote the quality of the children's environment to support and differentiate the development processes stimulated in their parents' homes, and if necessary, to try to balance the differences between the children and to enrich their experience as a whole by letting them interact in groups with other children (Goldstein and Brooks 2013; Peterson, Felton-Collins, and Peterson 1986).

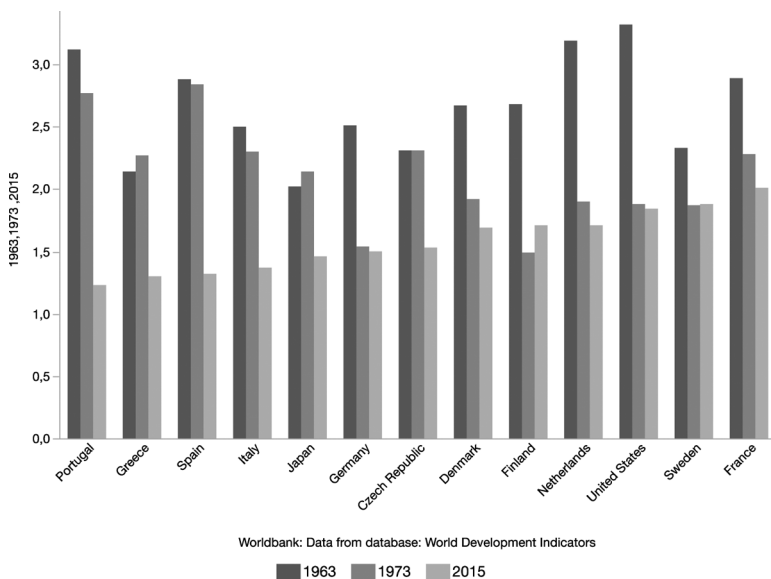
In research, the central importance of the parents for the child's development is undisputed. We know that the human capital of modern societies depends on the parents' willingness to invest time and money in their children and to share their private investments in housing and in the environment to further the development chances of their children (Carneiro and Heckman 2003; Heckman 2008, 2011). Nevertheless, in the public debate as well as in some scientific fields, especially in economics, these parental efforts for the development of human capital in modern societies is interpreted as "free time", which could equally be used for many other things.

The OECD's most recent recommendations for Japan are mainly concerned with the different presence of women in the labor market compared to men. This view denies the fact that increased women's presence in the labor market necessarily reduces men's presence to the extent that the time to develop the child's human capital so far invested by mothers is now to be accounted for by fathers (OECD 2017). The economists who evaluated the family benefits in Germany speak of the time for children as "free time", as if the caring for children could be organized as desired throughout the day (Bonin et al. 2013).

This relative depreciating of childcare and the willingness of parents to invest in the human capital of their children is astonishing, as since the 1970s in many highly developed industrialized countries, the readiness to choose and to care for children has declined significantly. This "second demographic transition" (Lesthaeghe 1995, 2014) appears in all highly developed OECD countries. And regardless of whether the government has attempted to influence these processes by a "pronatal" policy, the numbers of children vary only little in the individual countries.

Countries referred to as Social Democratic or Nordic are often praised for pursuing a policy of appropriate "work-life balance"; but their birth rates are hardly different from Japan or Germany (see Fig. 1). For exam-

**Figure 1:** Fertility rate in OECD countries: 1963, 1973, and 2015



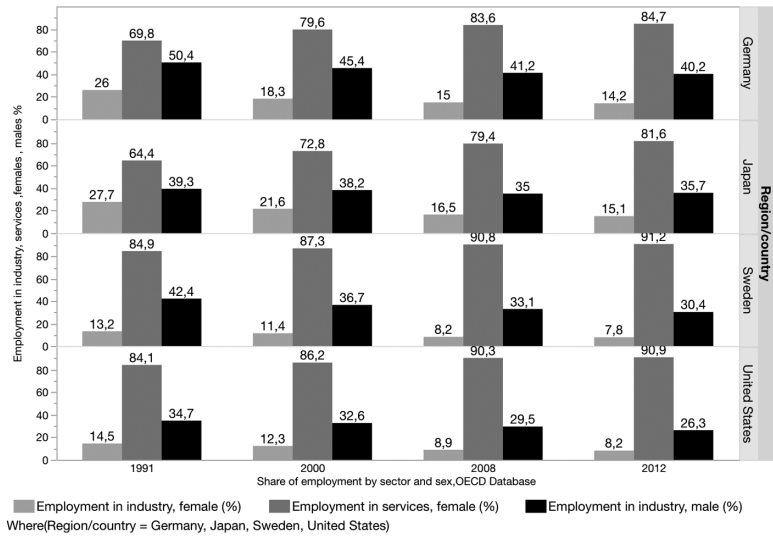
ple, the birthrate in Finland and Denmark with about 1.7 children was only slightly above the birth rate of Germany and Japan with 1.5 children. However, the decline in these countries is more pronounced than in Japan. France, with an explicit “pronatal” policy, has a higher birth rate (1.9 children per woman) but has also seen substantial declines since the 1960s (Castles 2003).

A society that wants to secure and develop its human capital cannot help but make sure that its birth rates are approaching or slightly above the OECD average. On the other hand, it must invest in the developmental potential of those children already born to ensure that these children will be able to compensate for part of the human capital missing due to the low number of births by using their better-developed competence.

Some states can undoubtedly learn by comparing their policy measures for families with other countries, as the birth rates between 1.3 in Portugal and Greece and 1.9 in France are a sufficient variation, which may be reduced by an appropriate policy.

It is also important to note that even highly developed OECD countries are acting in strongly differing cultural contexts regarding their family traditions, mentality, and goals in politics, economics, and culture (Bertram 2011b). Even though all these countries have achieved great prosperity since World War II (Zanden et al. 2014), they all have different cultural traditions and mentalities. This is true even for the economic development, which the various scientific disciplines, such as sociology or economics, often describe as a unitary process, but it is nevertheless necessary to show considerable differences in the individual countries. Since the mid-1970s, most of these countries have been designated in science as postindustrial countries, as after the industrial production of goods in the 1950s and 1960s, there are mainly intellectual achievements from the 1970s, and the goods production is outsourced to other countries (Hoey 2015). The percentage of industrial workers differs a lot between countries such as Japan, Germany, Sweden, and the USA, because the ways of modernization in the economies of the respective societies are similar and different at the same time.

In Germany, in the early 1990s, half of all men were employed in the industrial sector, and in 2012 it was still more than 40 percent. In Japan, the share fell from 39.3 to 35.7 percent, and even in the USA, a good quarter of all men were still working in the industry in 2012. The strong decline in the number of workers in the industrial sector depends mainly on the fact that many of the newly emerging professions have developed in the service areas. Here they recruited many new workers among females because the young generation of women is ready to qualify in these areas and also do work in these areas. The proportion of women employed in

**Figure 2: Employment in services and industries: females, males**

industry has fallen more steeply than that of men, and the women who are additionally available to the labor market have essentially moved into the service sector and have not attempted to enter the area of production in the same way as men. This is most pronounced in Sweden, where more than 90 percent of women work today. In all the societies studied here, there is a significant proportion of men still employed in the industry, whereas this is no longer the case for women in all countries.

Comparing the employment of men and women, the variation in employment among men is greater than among women, who are working very homogeneously in the service sector in all these countries. To label this development with a single concept such as “postindustrial societies” is problematic, as this term overstates these easily detected differences. For us, this is a representation of a plural modernity, where societies meet similar challenges, such as having to cope with the preservation and development of human capital and lower birthrates, but encounter these challenges under very different conditions.

This does not only apply to the development of the economic sectors in the respective societies, but also to family development, which is characterized by the cultural traditions and mentalities of the individual society, and thus provides quite a different context for coping with the development of human capital. Kato (2013) points out that in Japan the “ances-

tor family system" nowadays affects the family relations of the parent generation as a multi-local household (Bertram 2002). The obligations from this family system for the next generation are larger than in the model of neo-local families, which is prevalent in Northern and Western Europe, where the obligation essentially relates to the family's internal relationships. The development of a "work-life balance" varies necessarily in such different cultural contexts, because cultural values, individual relationships between parents and children, as well as legal regulations for the care of one's parents have a considerable influence on the integration of different living areas besides the family. The international recommendations for an appropriate work-life balance, such as provided by the OECD (Thévenon and Luci 2012), or national discourses such as the Japanese "All Women Shine" (Office of the Prime minister 2014), or the Equality Report of the German Federal Government (*Erster Gleichstellungsbericht*; BMFSFJ 2011), do not at all discuss these different cultural patterns. The concept of plural modernity (Bertram 2011a) reflects this multiplicity of developments with partial equal challenges quite well and will characterize the following analysis.

In the following, I will elaborate the argument that in demographic research as well as in family sociology and policy consulting this diversity concept has not sufficiently been taken into account for the development of a "work-life balance". It will be argued that the demographic challenge is not only the result of the fertility development, as the theory of the Second Demographic Transition implies. It also includes the point that the changed life expectancies in modern societies lead to the fact that the development of human capital must be placed on a different footing than in societies where, as a rule, there was only a 4 to 5 year survival probability after ending one's work activity.

Willekens (2008) explains the connection between demographic and educational development. In Japan, with a shrinking number of young people and the simultaneous need for additional qualifications for the growing demand in the tertiary sector, this leads to critical aging processes among the workforce in this area because otherwise the additional demand can no longer be met.

Here the thesis is formulated that the Japanese as well as the German society, similar to others, are in the process of the demographic transition, the end of which is not yet foreseen. This demographic change has already led to a great change in the respective societies. Nevertheless, many areas in science and politics are still operating with concepts that may have been appropriate in the 1950s and 1960s, but which do not adequately address the demographic transition of today. In the following, I will look at how the life courses in these transition

societies have changed, to demonstrate that an adherence to the classical structures leads to a rush hour in life for young parents in the development of the human capital of their children and thus makes the parents' role increasingly unattractive.

Since public discourse and science still assume that the human capital, with its source in every family and the behavior of the parents, is a leisure activity of the parents ("free time"), even politics strengthen this pressure on the parents, against every discussion of a work-life balance. Concerning these structural changes, I will figure out perspectives to transform the "rush hour of life" (Bertram 2004) into a "breathing life course". In the face of the demographic transformations, a model is sketched combining both the formation of human capital by the caring parents without the rush hour of life and at the same time making constructive use of the potentials held by men and women for the development of society.

#### NO TIME FOR CHILDREN: THE RUSH HOUR OF LIFE

Since the 1960s, Japan and Germany have been making significant efforts, like many other European countries and the USA after the so-called "Sputnik shock" (Picht 1964; Steeves et al. 2009), to increase the human capital significantly. It was not only invested in new schools and universities, but in particular girls, young women, and groups of people with traditionally no access to the education system were addressed in a targeted manner to open up all the resources of the country (Dahrendorf 1965). In Japan, about 5 percent of young women visited a college or university in 1960, 15 years later this proportion had already grown to more than 30 percent, while the proportion of young men was over 40 percent (Fukuda 2009). Today, around 60 percent of young people aged 25 to 34 in Japan have a university degree (OECD 2015).

Germany invested similarly in human capital, but not only in college and university education, but also in dual education. Many young people, especially young women, attend technical colleges and academies within a system of apprenticeships and other educational paths and acquire knowledge and skills, which in other countries are taught in college. As an example, in Germany, the training of an educator in a nursery presupposes a 12 or 13-year general education or 10 years of schooling and two years of vocational training, depending on the state (Bundesland). Afterwards, there is a 3-year apprenticeship at a technical college or technical academy; thus the training period does not differ from other European countries, which offer a university education (Bertram 2017a). However, as the OECD organizes their data on education according to the An-

glo-Saxon model with the highest degree, this training form is usually not adequately addressed and represented.

However, in Germany, in addition to the approximately 30 percent of academically educated 25- to 34-year-old young adults, all others have earned a qualified degree in the dual system. From a child's perspective, this means that in the mid-1970s, 50 percent of children grew up with mothers who had only eight years of schooling and worked without further training. Today, over 90 percent of children grow up with mothers who have either an academic education or a qualified professional qualification, lasting a total of 13 to 14 years, including school. This change has two significant consequences for human capital. On the one hand, the labor market can no longer efficiently dispense with these qualifications at all, as some of them were explicitly developed for specific occupations (Bertram 2017b). The additional qualified jobs for women in the education and social sectors can almost exclusively explain the positive economic development in Germany since the financial crisis of 2008 with around 600,000 new jobs. At the same time, this qualification boom in mothers has considerable consequences for the development of the human capital of their children, because today the children in Germany grow up almost exclusively with mothers with a much higher qualification level than was the case for their mothers' generation.

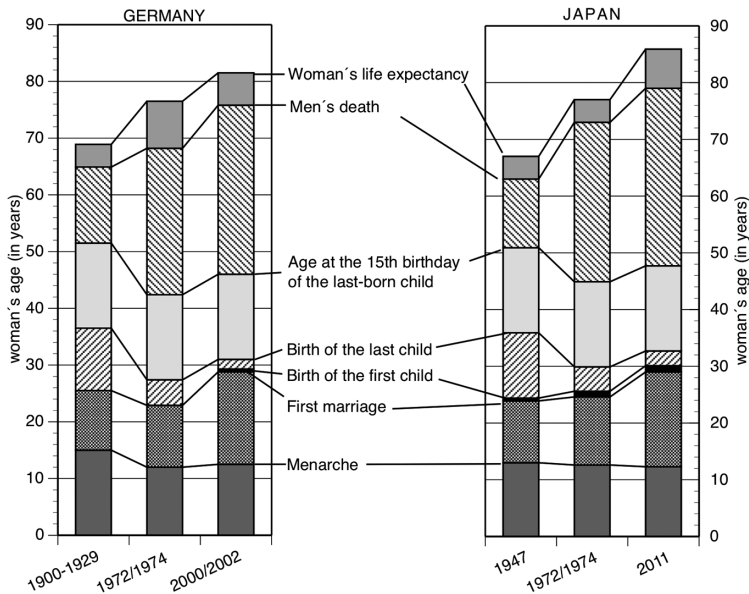
Economically and socio-politically, this double profit in human capital is extremely positive, because it improves the starting conditions for the children in school and education and at the same time benefits the society through the additional qualification of mothers. From the perspective of mothers, this qualification is a high gain, because today most of the mothers can support their living costs by their own income. According to microcensus data of 2015, about 75 percent of women in Germany cover their living expenses with their own income (Bertram 2017a).

Nevertheless, there is, of course, a great conflict for the mothers, the fathers, and also the companies and employers. Time for children and time for the profession cannot be directly related to each other. The "traditional-warm" family model (Hochschild 1995) addressed the children's care only to the mothers. Thus, the temporal professional requirements could be organized independently of the needs of children and the care by the fathers without any family responsibilities. Accordingly, the mothers could fill the temporal needs of the family without a commitment to the working world. Today, this model is no longer realistic due to the development outlined here, with the corresponding demand for the human capital of mothers, so that ways have to be found to relate better the two strictly separate living areas, which is the basis for the discussion of "work-life balance".

In addition to this argument, being firmly based on economic development, there is another reason why the classical model of the familial division of labor with the role of housewife and mother has no future. Figure 3 shows the changes in the life courses of women between 1919/1929, 1970/1974, and around 2000 in the form of a representation of historical demography.

In 1947, the average life expectancy for women was 65 to 70 years, and that of men was 3 to 5 years lower. This also explains that, despite the existing old-age pension insurance, hardly anybody claimed it at that time, but the widows' insurance was already necessary. At that time young couples married between the ages of 23 (women) and 26 (men) in Japan. In Germany in the middle of the twentieth century, the marital age in Germany went down significantly to 22 to 23 years. The most signifi-

**Figure 3:** Changes in the life course of married women since the beginning of the 20<sup>th</sup> century: Germany and Japan



Sources: Germany: Imhof 1981: Die gewonnenen Jahre: S.164 ff. For 2000/2002 own computation based on data of the Statistisches Bundesamt. Japan: Life Expectancy: Human Mortality Database; Age at birth and marriage: Vital Statistics Japan; Age at menarche: Hosokawa, Michie/Imazeki, Setsuko/Mitsunuma, Hideki et al (2012): Secular Trends in age at menarche and time to establish regular menstrual cycling in Japanese women born between 1930 and 1985, in: BMC Women's Health 2012, 12(19)/MEXT; Comment: Life expectation = Lifespan of women and men, who reach at least age 25.



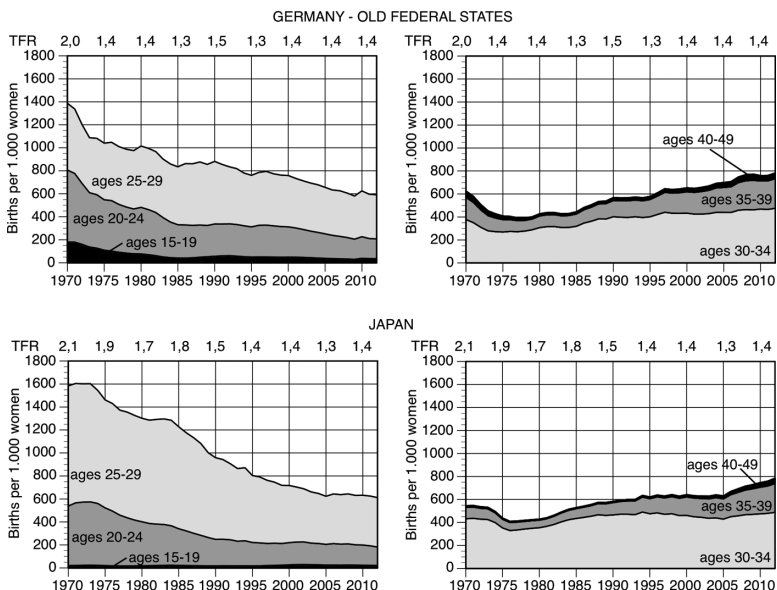
cant difference in the situation of women from the turn of the 19th century compared to those in the middle of the 20th century is the marked shortening of the reproduction period, which in both countries used to be between 9 and 12 years. At that time, more children were born, but they did not all survive. At that time, childhood mortality, whether miscarriage at birth or during the first years of life, was an essential part of maternal life. Until the 1970s of the last century, the long reproduction time decreased to about 4 to 5 years in both Japan and Germany and is now 2 to 3 years on average. Today, mothers with one child decide relatively shortly thereafter for a second child; and since rearing a third and fourth child has become very rare, they no longer influence reproduction time.

So the reproductive phase is only a limited period in the life course of the mothers and is not at all comparable with the beginning of the 20th century. Now there are years in the life course, which have to be redesigned separately because they are no longer dependent on the biological processes of reproduction. This fact is of decisive consequence for the mother's role. Nowadays, young women in Germany as in Japan decide much later for children, namely around the age of 30. In historical demography (Bertram 2017a) the end of the socialization process of 15 years is taken as a criterion. Due to the shortened reproduction phase, this process ends earlier than at the beginning of the 20th century. In those days, a mother had a life expectancy of about 17 to 18 years after the end of the socialization of the last-born child; today it is almost 40 years in Japan and around 35 years in Germany. The mother's role, determining biologically and socially most of the active life of a woman till the mid of the 20th century, has now become a limited life stage (Imhof 1981). Even though it is a crucial role, as it only takes 15 to 20 years in a 90-year life, it is difficult to construct a life model that is designed solely for this task of the mother. Therefore, the current discussions about "work-life balance" are not just about the technical problem of the better use of the human capital of the mothers in the economy, without questioning the necessary care for the children. Instead, there is a fundamental problem in how society re-interprets and re-constructs the female life organization. This theme will be resumed later for both sexes because the change of the one role necessarily leads to the change of the other one, namely the father's role.

A second significant change occurred in the life of young adults, especially in Japan and Germany. These demographic changes are taking place in all countries, but in different ways, as modernity knows many ways and not just one. The young adults in Japan and Germany decide to become parents very late, similar to the average in many other countries, but very consistently, as until the age of 30, hardly any children are born in both countries.

**Figure 4: Birth decline until the age of 30 in Japan and Germany**

Cumulative Period Fertility Rates (ASFR) and Total Fertility Rate (TFR), Germany\* and Japan: 1970-2012



Source: Germany 1967-2009: Statistisches Bundesamt Wiesbaden; Japan and Germany since 2010: Human Fertility Database; own further calculations. \*Old Federal States of Germany

In the 1970s, about 1,400 children were born to 1,000 mothers up to the age of 30 in Germany and around 1,600 in Japan. Today, the number of children born in this age group in Japan and Germany has decreased to 600 to 700 children, and the number of children born after the age of 30 has risen to 800 children in both countries. Compared to the USA, Sweden, and France, many more children are born in those countries until the age of 30. In the USA, 1,400 children are born on 1,000 women up to the age of 30, about the same number of children as in Germany during the entire reproductive period of women. Similarly, this is evident for France and Sweden, too. Over the age of 30, the birth rate is no longer different in most of these countries (Bertram and Deuflhard 2014). This change has very significant consequences for the individual interpretation of life between the 20th and 30th year, where there are few other parents in the peer group and thus hardly any models for young women and men as to how to meet the challenges of caring for children.

THE YEARS GAINED: YOUTH AS AN INDEPENDENT LIVING PHASE,  
THE DESTRUCTION OF HUMAN CAPITAL IN OLD AGE

Demographic science, as well as media and politics, tend to define the phase of young adulthood between 20 and 30 years as a leave from the parents' home to become economically independent and to form a new family, thus interpreting this life phase as a transitional one. On the other hand, in youth research, the view is dominant that young adults are more likely to interpret this lifetime as a finding phase for one's personality, important for both the professional and the social position. For young people and young adults, it is not a transitional phase with the aims of family, marriage, and children, but represents "gained years", offering free space for an independent way of life (DePaulo and Morris 2005). This interpretation explains why, especially in Japan and Germany, the share of those is somewhat high who are looking for an independent lifestyle at this age, but do not see their lives in partnership, family, and children, but as an independent and self-determined form of life.

Science and politics have considerable difficulties with this life form and take it usually as a deficit (Hradil 2003). In demography, the central question is mostly why just highly qualified young women, often in specific academic disciplines, have relatively low birth rates (Hoem, Neyer, and Andersson 2006; Testa 2014). However, investing in the human capital on the macro level also has consequences for the individual behavior of those with a high qualification, as with growing education, the options for a diverse lifestyle and new life perspectives are increasing as well. From an economic and social perspective, this process is advantageous. In a global economy and new occupational fields with new economic priorities, these young adults are welcome: They have few personal obligations, are relatively flexibly used, take risks and endure uncertainties, just in contrast to those who live in a fixed relationship and care for children. With his model of the "flexible capitalism" and the "flexible man," Sennett has shown that the secure and explicit references in the working world of the industrial society and private life do no longer exist in modern, flexible capitalism (Sennett 1998).

Thus, if youth research interprets this lifetime between the 20th and 30th or even 35th year as an independent life phase for young people and young adults, not necessarily leading to family and marriage, this may be deplored by a traditional idea of the life course in an industrial society with its fixed structures. However, the question here is, whether such a life course can be sustainably maintained at any time since the structure of the working world has changed considerably. In both Germany and Japan, young women are more affected by these changes and uncertain-

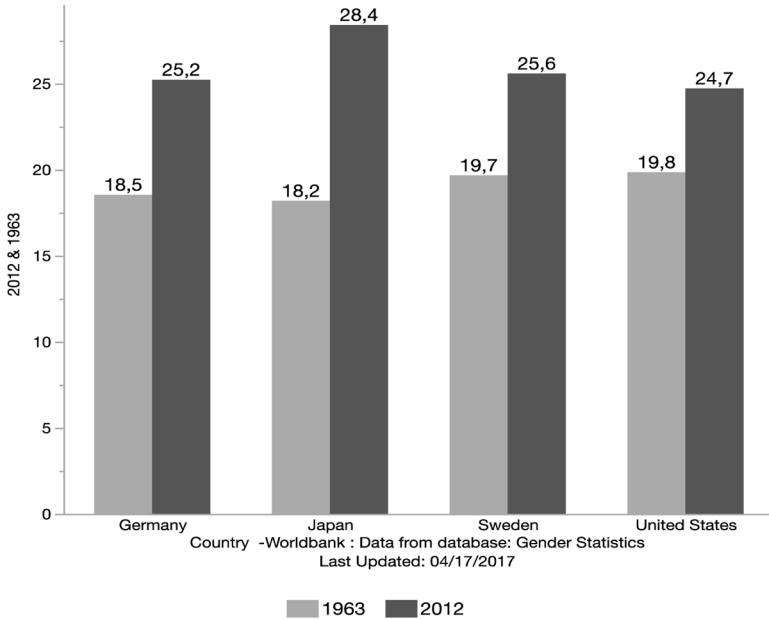
ties than men, due to a significant proportion of men still living in industrial structures, because this is their working environment (see Fig 2), whereas more than 90 percent of the women of this age have left this area. In the service sector, job security and the prospect of working for the same employer until retirement are much lower because the companies in this sector are less stable than industrial companies.

This development applies not only to Germany and Japan but even to child-bearing America, where the birth rate of academically qualified young women is also 1.6 to 1.7 children (Cohen 2013). It must be accepted that in an economy in which industry plays a significant role only for the men, the standard life course developed in the industrial society can be binding just for an ever smaller part of society members. As a consequence, the higher uncertainty and flexibility in the other areas with more significant option diversity leads to lower reproduction rates due to the higher qualifications in all countries.

At the same time, the question arises whether adherence to these industrial-social life-cycles corresponds to the demographic transformation described here. Willekens believes that a combination of different policy areas is necessary to maintain the human capital of society (Willekens 2008). Family policy should improve the conditions of caring for the children and ensure that those who choose to become parents can also provide this care and do not have to pay for it with lost time and career losses. Labor market policy and education policy should also ensure that the profits achieved in human capital, especially in the older generation, are not merely broken or destroyed. Up to today, the organization of both life courses and professional processes has not at all been adapted to the increased life expectancy since the 1960s.

In addition to this increase in life expectancy, in Germany, according to OECD data, about 40 percent of all over 65-year-olds subjectively consider themselves as healthy. Due to the increased life expectancy, Germany alone waives the use of the human capital of 6 to 8,000,000 people, about the same number of citizens older than 65 years in the early 1960s. These relations are similar in other countries. From the subjective perspective of those concerned, the question arises as to how the benefits of life expectancy of 8 to 10 years with good health after retirement can be filled meaningfully and constructively, for the individuals on the one hand and society on the other. There are not yet any opportunities for a flexible transition to retirement, which at least would give the majority of the healthy older people the chance to bring their human capital into the labor market and society.

How backward these ideas are to orient the life course according to the realities of the industrial society becomes particularly apparent when

**Figure 5:** Life expectancy for 60-year-old females

comparing the individual changes of the organization of the life course in the young generation with the older generation. The event data around 1960 show impressively that in the generation of the 40-year-olds, it was self-evident to organize economic independence, partnership, marriage, and the decision for children in the tight chronological context between 23 and 26 years of age. This connection does no longer exist in Germany for those born around 1970. Partnership, i. e., sexually intimate relations, begins much earlier than in the previous generation and is no longer tied to the decision for children, but is lived as “sequential monogamy” (Schmidt 1993). They reach their economic independence much later and decide for children and marriage even longer after that and independently of previous processes.

As a result, private life of these individuals is structurally different from the lifestyle of their parents' generation, even if they do not remain single. But the society did not at all clarify the question of how to adapt the life courses in the professional field to the changed lifespan. Today, it is usually accepted that private relationships, even with children, may drift apart again because people can change considerably in a long life. The flexibility at the beginning of the professional development and the longer duration

of establishing oneself in the occupation are corresponding to these changes in the private sphere. But the conceptions of a life-long profession and the collectively determined occupational exit, i.e., politically regulated specifications, are treated as if one could not change them.

The efforts of the state, society, and the economy to use the human capital of young women and mothers equally to men for the economic development of society are significant. But it remains to state that the real challenge of the future will be to utilize the human capital of the elderly of society as is appropriate to the individual life-plans of the elderly and at the same time necessary for economic development.

#### THE CONSEQUENCES OF THE RUSH-HOUR OF LIFE FOR INDIVIDUAL LIVING

As late as the middle of the 1960s, private household management in a household with 2 to 3 children had both a temporal and physical workload comparable to the man's industrial work. According to Bianchi's time budget analyses (Bianchi et al. 2014), an American mother served an average of 32 hours of housework, 10 hours of childcare, and about 7 hours of shopping a week. This 50-hour week was hard work, consuming about 3600 calories (Archer et al. 2013). Today, it is forgotten that many of the technical work facilities were only implemented in the 1970s, thus facilitating household management together with a decline of births.

Today, housework time is about 17 hours; childcare with 14 hours increased by 4 hours; the time for shopping has remained roughly the same. The calorie consumption is now about a third of the former amount (Archer et al. 2013). Also, however, there is the working time outside the house for an average of 24 hours. The free time for mothers per week declined from 35 to 31 hours. In the case of American fathers, a similar decline in the freely available time to 32 hours is to be mentioned; they have kept their professional work almost constant at around 43 hours, but now spend more time on housework (10 instead of 4 hours), much more time on childcare (8 instead of 3 hours) and 5 hours on shopping. From the American data over time, it becomes clear that the additional professional work of the mothers is not at the expense of the children and childcare time, but is saved in free time, and that also applies to the fathers.

And this is true not only for the USA. On the contrary, Boll shows in her comparison of European countries that the time for children has risen significantly despite the increasing labor participation of mothers (Boll and Leppin 2011). From the perspective of human capital, this is easy to understand: With the increased demand for more and more children to acquire professional and academic qualifications, the children now have

to be facilitated by their parents, who were not yet motivated by their parents for such educational qualifications. At the same time, the competition between children, young people, and later young adults is becoming ever more severe due to the rising number of children who are struggling for qualified degrees.

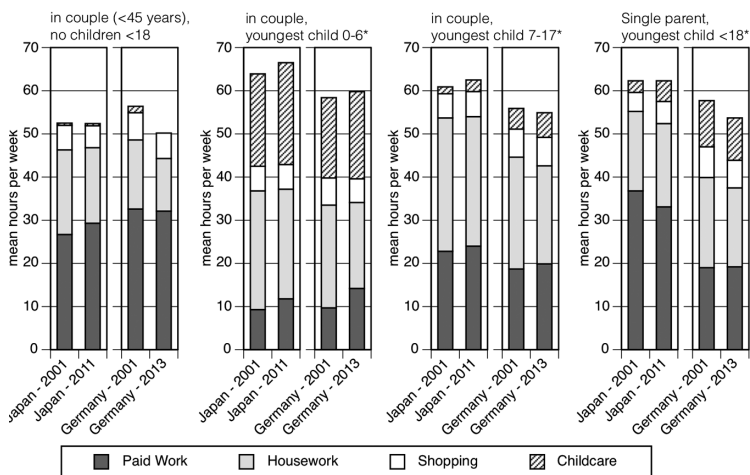
The American Academy of Sciences has illustrated this process using the example of three generations of its female members (Wassermann 2000). The first generation of outstanding scientists at the Academy were exceptions; they were able to resort to family resources and could act successfully in the system with appropriate support from their family and husband. In the generation of today's 60 to 70-year-olds all restrictions of a legal nature had fallen, and these young women could go through the doors that were opening right at the beginning of their academic careers. There remained a few restrictions, but the two life options of children and profession seemed to be achievable. In the youngest generation, today's 40- to 50-year-olds, the situation of open doors has not formally changed, but now there is a severe competition for privileged positions because there are not only a few women competing, but one-third up to one-half of an age group.

Since today's parents have already mastered this situation themselves and know what their children can expect, it is plausible that parents today spend more time and energy on their children than previous generations without these experiences. For this is not limited to finding the right day-care center, kindergarten, and school, but also includes the communication and partial cooperation in the institutions, the accurate observation of the development of children, and the promotion of specific talents. Additionally, it includes the shaping of the children's free time, as – unlike the childhood of these parents – the possibilities of especially the younger children to move outdoors independently of parents or other adults are always limited in the increasingly urbanized world.

From a social perspective, this parental behavior is beneficial because the intensive support and development of the child's talents in the parents' home significantly improve the human capital of the entire society. If at the same time, it is also possible to use the human capital of mothers in addition to the human capital of the fathers in an economically meaningful manner, such behavior becomes a "win-win" situation as a whole. From the parents' point of view, only the time budget is limited, and they have to reduce their free time for this overall social task which they fulfill in the interest of their children.

Current time budget data from Germany (2011/2013) and Japan (2011) show the immense expenditure of time by parents for their children, and one has to get rid of the illusion that the parents would be significantly relieved during this time. Figure 6 shows the time use of women without

**Figure 6:** Time use of women for productive work by activity and form of living, Japan and Germany: 2001 and 2011/13



Source: Japan: 2011/2001 Survey on Time Use and Leisure Activities (Statistics Bureau, Ministry of Internal Affairs and Communications) (<http://www.stat.go.jp/english/data/shakai/>; accessed on 2015/11/02), own further calculations. Germany 2013: FDZ der Statistischen Ämter des Bundes und der Länder, [Zeitverwendungserhebung], [2012–2013], own calculations; Germany 2001: Harmonised European Time Use Survey (HETUS) [online database version 2.0]. Created 2005–2007 by Statistics Finland and Statistics Sweden. <http://www.tus.scb.se/>; own further calculations. \*for Japan youngest child with couple 0–5 and 6–17 & single parents with children under 20. Note: Due to the classification of activities in the Japanese Time Use Survey personal care for a school-age child is included in the category "housework".

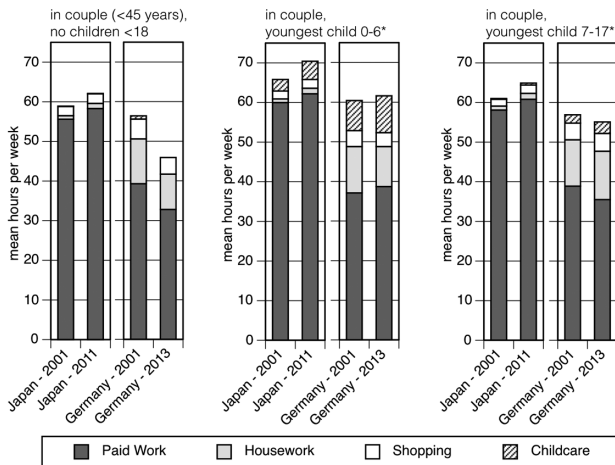
children, with children up to 6 years, with children aged between 7 and 17, living with a partner, and as a single-parent, compared to the 2001 budget survey of Japan and Germany with the data from 2011 in Japan and 2013 in Germany. The number of the pairs of the respective life form always applies to the totality, whether or not they are employed. Childless couples have on average about 50 working hours per week with about 30 hours of paid work and 20 to 25 hours of housework and shopping. Both forms of work are a productive activity because they are necessary for the livelihood of the individual, which can be outsourced without difficulty to the market, as is sometimes done.

Compared to couples with children under the age of 6, both in Germany and Japan, the weekly working hours for paid work, housework, caring for children, and shopping were about 65 hours in 2001 and about 68 hours in 2011 with a significant increase in childcare time; on the other hand, housework has decreased somewhat. In Germany, the housework time is significantly shorter, and the childcare rate in 2013 is slightly increased by 20 hours compared to 2001, but not as clearly as in Japan. The



total time for mothers with children up to 6 years is on average 18 to 20 hours higher than for childless women. This apparent difference between childless women and women with children is significantly reduced among older children. In Japan, it is still about 60 hours, but the difference to childless women has almost halved; even in Germany, the 55 hours are not different from the 50 hours of childless women. As the main difference between mothers with older children, the care time for children is significantly reduced and also the professional work is apparently behind the work of the childless women. Among Japanese women, the substantially higher proportion of household work is striking compared to German mothers in this age group: Nearly 30 versus 20 hours is a big difference. In the case of single mothers, the working hours are higher than in Germany, which leads to less free time, and significantly reduces the care time in comparison to Germany.

**Figure 7:** Time use of men for productive work by activity and form of living, Japan and Germany: 2001 and 2011/13



Source: Japan: 2011/2001 Survey on Time Use and Leisure Activities (Statistics Bureau, Ministry of Internal Affairs and Communications) (<http://www.stat.go.jp/english/data/shakai/>; accessed on 2015/11/02), own further calculations. Germany 2013: FDZ der Statistischen Ämter des Bundes und der Länder, [Zeitverwendungserhebung], [2012-2013], own calculations; Germany 2001: Harmonised European Time Use Survey (HETUS) [online database version 2.0]. Created 2005-2007 by Statistics Finland and Statistics Sweden. <http://www.tus.scb.se>; own further calculations. \*for Japan youngest child with couple 0-5 and 6-17. Note: Due to the classification of activities in the Japanese Time Use Survey personal care for a school-age child is included in the category 'housework'.

Comparing men's time for productive work in the household and at work, they have over 70 working hours in Japan and about 60 hours in Germany. In Japan as well as in Germany, childless men on average work

less than men with children and reach about 60 hours in Japan and about 50 hours in Germany. Similar to the women, this is reduced with the age of the children, because Japanese men reduce their efforts to provide care for children and, in addition to this reduction, the professional work also decreases slightly in Germany. There is a striking difference between the very long working hours of men with children up to the age of 6, with a total of 70 hours, 60 of which are professional work, which has been established as a standard in all the groups here.

The combined time quota is the sum of working hours in occupation and household of fathers and mothers; this is in Japan 135 to 140 hours and in Germany about 120 hours. These differences cannot be explained in detail. However, the extremely long working hours of Japanese men may hardly be compensated by Japanese mothers with children up to 6 or 17 years sharing the working time with their partner on a parity basis, because then, as in Germany, a fatal effect occurs. I already pointed out that a large percentage of Japanese and also German men are still active in the industrial sector with generally relatively well-paid jobs. The discussions on the gender pay gap based on OECD data are present in both countries. Only the different distribution of men and women in various sectors leads to a loss of income for the families if the equalization of the partners' working time means the reduction in men and an increase in women. An industrial worker in Stuttgart earns between 23 and 27 Euros an hour (Bertram and Deuflhard 2014) and his partner as a qualified teacher about 17 Euros. The equalization of the work hours of both partners leads to a reduction of the total income in this partnership with the same number of hours due to the gender pay gap between both professions as educators are simply paid less. This will be taken up again in the discussion of the political measures.

This example figures out a point which is rarely addressed in science: Families and couples operate as a unit both economically and with regard to the children. In science as in politics, however, the perspective of the individual family members is much more discussed separately, and from the view of the female family member "mother," the lower participation of the man in domestic work and her lower income leads to the estimation "unfair". From the perspective of the family system, however, it may be effective because a "premium" is paid to this "unfair" form of division of labor by the unequal incomes of men and women. Only if the educator is paid exactly as the industrial worker, the individual can solve the question of fairness individually. Programs that want women to "light up" in economics are well advised to address this issue since otherwise the fairness of the division of labor can only be achieved through the income loss of the family system.

To this extent, the OECD's (2017) advice to reduce the working time in Japan is cheap but does not solve the problem of justice and fairness. The same applies to the different hours of the workload in the household and the workplace between those with children and those without children. In any case, as shown here for Japan, childlessness is socially rewarded by a high plus of freely available time.

Similar to one's profession the impact of children is very different in the life course of people. The close bonding needs of very young children require a different attitude than the tolerance of the parents against their growing children during adolescence. These processes are usually very private and can hardly be influenced externally, but form the fundamental prerequisite for a successful socialization. The possibilities to decide for children with the resulting temporal consequences are much less variant. On the one hand, there is a societal need for an increasing human capital with correspondingly longer training and finding processes in the professional world. On the other hand, the biological processes of fertility are still given in a particular time window (Stock et al. 2012). This time window between 28 and 35 years is just the time phase in which the career positions demand the central decisions with correspondingly high demands and challenges on the young adults. This rush hour of life results from the contradiction between the relatively fixed time of biological reproduction, the social demand for the increase of the human capital of society among children who need more support from their parents, and the simultaneous demand for the necessary human capital which women contribute with their qualifications.

#### SATISFACTION AND QUALITY OF LIFE AS INDICATORS OF A SUCCESSFUL FAMILY POLICY

The dilemma outlined here has not yet been adequately resolved by any highly developed industrial society. In all industrialized societies, the high and highest qualified young adults are more numerous in reducing the number of children than those who decided early for children, thus limiting the possibility of their professional development. As was evident in the discussion of the new life forms such as single living, this change is to be accepted because the "won" years later in life are not yet sufficiently used to compensate the human capital reserves of the younger members of society. Now, using the resources of the human capital, it is not about machines whose duration is to be determined, but about people with very different life plans, life goals, ideas of fortune, talents, and social relations with others.

Consequently, for all age groups, for each sex, and for those immigrating into society, both the standard of scientific research and the standard of policy must be aligned with these various wishes and ways of life in such a way that the overall social desire for stability or the growth of human capital coincides with the development possibilities of children and the related care of their parents. It is about taking into account the life plans and wishes of those who have chosen to care for their children so that they are self-determined to decide how to relate these areas to one another. Not for nothing has the concept of “work-life balance” gained such a prominence. The previous reasoning should have made clear that this balance refers to the whole life course and not just to a specific life stage. There seems to be an urgent need to develop scientifically based standards that ensure that care for children as well as the life concepts and life plans of parents are constructively linked to the desire of society to maximize the human capital.

This is most likely to be the case if the question of how much percent of an age group is available to the labor market or how the PISA results or other tests of the children are no longer sufficient to achieve the goal in research as well as in politics. On the contrary, for both parents and children, the quality of life of family life forms, the satisfaction of the parents with the possibility of realizing their own life goals, the satisfaction of the children with the school and with their living environment become topics of research and also standards for good political action.

Moreover, such an orientation has the indisputable advantage that in a world in which the life courses necessarily change, because the life expectancy, the vitality and the competence of the population are increasing, no one knows exactly how a future meaningful lifestyle will be. The only thing we see today is the fact that many things which for a long time we have interpreted as a sense of life, such as the mother role or the professional role, now in a very long life change to only life phases. They need to be linked constructively with each other without the decision for one or another role, and without being socially and economically disadvantaged. The conceptions about the meaningfulness of individual life goals and life roles can change significantly over time. What applies to the generation of today's 60- to 70-year-olds does not have to refer to the generation of today's 30 to 50-year-olds. This middle age group now provides the central care work for children and is also the central generation in the working world.

Meanwhile, the OECD is trying to compare the quality of life internationally with the concept of well-being which, in addition to health, takes account of occupational participation, social risks such as crime and the possibilities of social relations as well as the development opportunities

of children. Other organizations, such as UNICEF, are working with such concepts for child development. The here presented comparison of countries differs from these concepts mainly by the fact that here only very few countries are compared. This has the advantage that, when discussing policy options, the international perspective developed by the OECD can be taken into account as well as the specific developments in Japan and Germany.

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