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**Women's polarizing preference for motherhood and employment  
in Germany Can work and family life be compatible?**

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**MA Programme Euroculture**

**Declaration**

I, Jing Hao, hereby declare that this thesis, entitled '**Women's polarizing preference for motherhood and employment in Germany Can career and family life be compatible?**,' submitted as partial requirement for the MA Programme Euroculture, is my own original work and expressed in my own words. Any use made within it of works of other authors in any form (e.g. ideas, figures, texts, tables, etc.) are properly acknowledged in the text as well as in the List of References.

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## **Abstract**

Persistent ageing population is an alarming problem in today's Europe. Germany as one of the largest economies is also known for its decades' long population ageing due to continuing fertility decline. The dearth of labor force in the market, as a result of the ageing population, demands increasing female participation in the labor market; meanwhile, the persistent fertility decline signifies significant need of new childbirths. Hence, this double-burden progressively alights on women's shoulders. Moreover, ineffective policies, social constrains and insufficient child care facilities in Germany aggravate women's incompatibility between motherhood and employment, which become two exclusive alternatives (Kreyenfeld, 2004) for German women. Hence, two polarizing categories appear in German society --- work-oriented and family-dedicated (Hakim, 2006).

Based on Fahey and Speder's (2004) affordability hypothesis and "mismatch" of people's preferences and ultimate aspirations, this thesis argues that German women desire to have both children and career, however their preference to do so is quite restricted by incompatibilities of employment and motherhood from social constrains.

Based on this argument, this thesis essays to examine how German women's preferences for childbearing and childrearing is affected by the current social constrains in Germany. This thesis strives to shed light on the linkage between preferences and constrains by a preference-constrain-framework. Due to special historical facts, differentials of fertility development and female labor force participation between West Germany and East Germany are also elaborated.

This thesis argues that policy-makers should formulate timely and effectual maneuvers for raising fertility rate as well as encouraging female participation in labor force, based on the connections of people's preferences and social constrains. This thesis finds out that subsidized high-quality child care is a key solution to amend the fertility rate and female labor participation in the West Germany while appropriate economic support and incentives can help these two issues in the East Germany.

Key words: Germany, preference, fertility, female labor force participation, Child care

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Still, whether we like it or not, the task of speeding up the decrease of the human population becomes increasingly urgent.

--- Havelock Ellis

## 1. Introduction and background

### 1.1 The population trend in general

A stable and robust population is the pillar for the animation of a society, in terms of both economic and social aspects (Bloom and Canning, 2008). Aging population symbolizes a substantial social problem and the major cause of this problem is argued by many scholars and researchers as the combination of increasing life expectancy and continuous declining fertility rate. The persistent extension of life expectancy can be, if not totally, attributable to the result of high improvement in the quality of life and decent availability of healthcare along with the rapid development of the society (Kramer, 2012). According to the estimation provided by Eurostat, the average life expectancy in the world has reached 67.9 years, which compare to two decades ago has increased by 3.5 years. The World Population Projection (WPP) 2010 version provided by United Nations shows that the life expectancy in countries with low-fertility rate was projected to be around 80 years by 2050.<sup>1</sup> As can be seen in table 1, the life expectancy in the EU-27, is even higher than the other areas of the world.

(Table 1 about here)

In spite of the increasing longevity, the number of newborns is posing a standstill or even unpalatably declining trend. At present world, 42 percent of the population lives in low-fertility countries wherein the totally fertility rate is below replacement rate.<sup>2</sup> Countries with high fertility rate chiefly congregate in Africa, Asia, Oceania and Latin America, most of which are developing countries. While the fertility rate below replacement level is in most developed countries (Frejka and Calot, 2001). Majority of the nations in Europe, apart from Ireland and Iceland, are more or less afflicted to low

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<sup>1</sup> Data presented from World Population Prospects 2010 version provided by United Nations, Department of Economic and Social Affairs. Population Division, Population Estimates and Projections Section. Further information please refer to: [http://esa.un.org/unpd/wpp/Documentation/pdf/WPP2010\\_Press\\_Release.pdf](http://esa.un.org/unpd/wpp/Documentation/pdf/WPP2010_Press_Release.pdf)

<sup>2</sup> Information presented from World Population Prospects 2010 version provided by United Nations, Department of Economic and Social Affairs. Population Division, Population Estimates and Projections Section. Further information please refer to: <http://esa.un.org/unpd/wpp/Documentation/publications.htm>

The replacement rate refers to a total fertility rate of about 2.1 children per woman, which is considered to be the certain level when the population of new generation can ensure to replace the previous one (inward and outward migration is excluded).

fertility rate or even increasing fertility decline.<sup>3</sup> The current proportion of the EU-27 in the world's population was only 7.3 percent. It is projected to become even smaller if the current average fertility in Europe continues to remain low or further decline.<sup>4</sup>

From aforementioned, it is fairly notable that the population ageing is particularly grave and intractable in Europe compare to the rest of the world. The fertility rate in Europe has declined persistently over the past five decades (Bloom and Sousa-Poza, 2010). This long decline is deemed rather disconcerting from today's perspective, with increasing life expectancy due to advanced health care facilities and high standard living conditions. Hence, more newborn children are rather crucial for offsetting the increasing elderly generation. However, the persistent fertility decline is very unfavorable. It is projected that by the year 2050, there will be fewer than two persons of employable age supporting each person at the age of 65 and over in the European Union member states.<sup>5</sup>

Germany, as Europe's largest economy and one of the most developed countries in the world, also has been suffering the most severe population decline for around four decades since the mid-1960 (Dorbritz, 2008, Cygan-Rehm and Maeder, 2012). Executive director of the Max Planck Institute for Demographic Research, Joshua Goldstein remarked that Germany holds the longest history in terms of low fertility compare to other European countries. He pointed "The German birth rate has remained remarkably flat over the past few years while it has increased in other low-fertility countries in Europe."<sup>6</sup> From figure 1 and figure 2, it is salient that the German total fertility has been and is projected to be persistently below the average level of total fertility in Europe; at the same time, the life expectancy of Germany has been and is projected to be higher than the average life expectancy of Europe in total.

(Figure 1 and Figure 2 about here)

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<sup>3</sup> Information presented is adopted from Eurostat; further information please refer to: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Fertility\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Fertility_statistics)

<sup>4</sup> Information presented from Eurostat; further information please refer to: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/European\\_population\\_compared\\_with\\_world\\_population](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/European_population_compared_with_world_population)

<sup>5</sup> Information presented from Eurostat; further information please refer to: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/European\\_population\\_compared\\_with\\_world\\_population](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/European_population_compared_with_world_population)

<sup>6</sup> Sources from Baby Gap: Germany's Birth Rate Hits Historic Low published by TIME: <http://www.time.com/time/world/article/0,8599,1991216,00.html>

## 1.2 Population ageing in Germany

Over the past four decades, the total fertility rate in Germany has dropped from 2.2 children per woman to around 1.4 today (see figure 1), much lower than the replacement rate of 2.1 children per woman. Meanwhile the life expectancy is continuing to increase. Roderich Egeler, the president of the Federal Statistical Office (Destatis), declared recently that by 2060 one seventh person (about 14 percent of the population in Germany) was expected to be around the age 80 years or even over.<sup>7</sup> According to the results from the 12<sup>th</sup> German population projection provided by the Federal Statistical Office (Destatis), the life expectancy in Germany is estimated to be 85.0 years for new born boys and 89.2 years for new born girls by 2060 (see figure 2), with the number of people at the age of 70 years or above more than doubled as that of newborn babies (see figure 3).

(Figure 3 about here)

The combination of declining fertility and increasing longevity lead Germany to a grave population deficit. At present, the German population is about 82 million;<sup>8</sup> with population of working age (20 to 64 years) about 50 million. Based on the current trend of fertility rate and life expectancy, it is estimated by Federal Statistical Office (Destatis) that the population will drop to not more than 65 to 70 million by 2060,<sup>9</sup> with the population of working age consisting of some 33 and 36 million<sup>10</sup>, which is 27 percent or 34 percent less than the number at present.

The Federal Statistical Office alarms that:

(...)the number of deaths will increasingly exceed the number of births. This will lead to a rapidly growing birth deficit, which cannot be compensated by net immigration.<sup>11</sup>

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<sup>7</sup> Information presented from Federal Statistical Office (Destatis); further information please refer to: [https://www.destatis.de/EN/PressServices/Press/pr/2009/11/PE09\\_435\\_12411.html](https://www.destatis.de/EN/PressServices/Press/pr/2009/11/PE09_435_12411.html)

<sup>8</sup> Data presented is from Federal Statistical Office (Destatis); further information please refer to: <https://www.destatis.de/EN/Homepage.html>

<sup>9</sup> Data presented is from Federal Statistical Office (Destatis); further information please refer to: [https://www.destatis.de/EN/PressServices/Press/pr/2009/11/PE09\\_435\\_12411.html](https://www.destatis.de/EN/PressServices/Press/pr/2009/11/PE09_435_12411.html)

<sup>10</sup> Data presented is from Federal Statistical Office (Destatis); further information please refer to: [https://www.destatis.de/EN/Publications/Specialized/Population/GermanyPopulation2060.pdf?\\_blob=publicationFile](https://www.destatis.de/EN/Publications/Specialized/Population/GermanyPopulation2060.pdf?_blob=publicationFile)

<sup>11</sup> Quotation presented is from Germany's Population by 2060. Results of the 12<sup>th</sup> coordinated population projection. Federal Statistical Office (Destatis); more information please refer to: [https://www.destatis.de/EN/Publications/Specialized/Population/GermanyPopulation2060.pdf?\\_blob=publicationFile](https://www.destatis.de/EN/Publications/Specialized/Population/GermanyPopulation2060.pdf?_blob=publicationFile)



Dwindling working age population associated with increasing life expectancy and higher proportion of elderly persons renders the demography of Germany like a pyramid upside down, with more and more aging people situating on the top needed to be supported while the young are tremblingly standing at the bottom, providing social expenditure including pensions, healthcare, institutional care.

In 2004, the fertility rate in the west of Germany dropped to 1.37 per woman. The last time fertility rate dropped to such a low level was back to 1987 (Federal Statistic Office, 2006). This low record of fertility rate triggered great alarms; some reforms on fertility therefore were enacted immediately. However the efficiencies of those reforms are frequently questioned or even seen as a failure (Dorbritz, 2008), on account of their little effect on boosting the fertility rate, which is still abominably far from replacement level. As a matter of fact, the family policies or any other measures taken by the government in order to raise the fertility rate, though have had a long tradition in Germany, are by far, if not utterly futile, of little avail and seen as one of the main reasons that result in persistent fertility decline (Dorbritz, 2008).

Furthermore, continuing population ageing brings great pressure and double-burden to women. On one hand, low fertility rate signifies fewer births giving by women. The cohorts of newborn girls in Germany have been already smaller than those of their mothers (Federal Statistic Office, 2009), which mean that the number of potential mothers is also persistently falling. This will inevitably lead to a so-called vicious circle with fewer mothers giving birth to fewer daughters, who are declining potential mothers. Women, especially those with high education or career, are always imputed to the decline of birth rates. On the other hand, population ageing leads to fewer people at the working age to support increasing elderly people. Decline in the labor force shows an urgent demand for more female participations in the labor market. In most developed countries which have been experiencing fertility decline, also have been seeing increasing employment rates of women. Germany, however, is named as a very prominent example of a highly developed country with persistent fertility decline and at the same time low female participation in the full-time labor market (Haan and Wrohlich, 2009). Besides, though Germany as a highly developed nation with advanced welfare offer, the society still conform to a rather traditional family structure with men as the breadwinners while women are expected to be the family carers at home. One can

argue that in Germany, women are facing pressures not only from low fertility behavior, but also unfavorable female labor force participation. It seems very difficult for them to combine employment and motherhood. German women are prone to be divided into two glaring groups; one is dedicated into family and the other is centered with work. Due to these peculiarities, this thesis chooses to focus on the case in Germany, precisely on the connections between the social constrains and German women's preferences towards childbearing and employment.

In section 2, main theories and approaches of this thesis are presented. Section 3 includes the analyzing of the linkage between German women's preference and social constrains. Differentials between the West Germany and the East Germany on fertility development are elaborated in Section 4. In the last section, a conclusion is drawn and this thesis is completed by a further discussion.

The main data and numbers presented in this thesis are mainly using the source available of Federal Statistical Office (Destatis), known in German as Statistisches Bundesamt. It is a federal authority of Germany, responsible for gathering, analyzing and presenting statistical information pertaining to economy, society and environment. It aims to the public objective and highly qualitative statistical information. The population projection provided by Federal Statistical Office (Destatis) is designed to forecast future changes of the population and quantify that change. It collects information for an extensive scope of demographic data, comprehending statistics on the number of live births by gender, by the mother's age, education and marital status. In addition, fertility statistics are compiled associated with the birth numbers sorted by the categories of first birth, second birth, third birth and more in this manner. The model of this population projection is based on the entire population sorted by cohorts, which are updated annually. Furthermore, the projection is prepared as Germany in aggregate, deriving from diverse assumptions pertaining to fertility, life expectancy in Germany, providing a framework of future development scenarios. The results are derived from harmonized assumptions and identical calculation methods. The accuracy of this projection is relatively dependable.<sup>12</sup> Additional information is drawn from the German Socio-Economic Panel<sup>13</sup> (SOEP, known in German as Sozio-oekonomisches Panel).

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<sup>12</sup> For further information please refer to:

<https://www.destatis.de/EN/FactsFigures/SocietyState/Population/PopulationProjection/Current.html>

<sup>13</sup> More information please refer to: <http://www.diw.de/de>

German Socio-Economic Panel is a panel database of the population in Germany. After the unification of former FRG and former GDR in 1990, samples from East Germany has also been taken in this database.

## **2. The approaches of the research:**

The determinants of the fertility change and female employment behaviors have been analyzed and presented in plethora of literatures from previous studies on these questions. Fahey and Speder's (2004) theory on low fertility rate and Hakim's (2006) classification of women are particularly found the most appealing and useful in this thesis. In their research, Fahey and Speder (2004) present two viewpoints on low fertility rate --- macro-structural point of view and the quality of life point of view. These two viewpoints, as argued by Fahey and Speder (2004), are pointing at opposite directions when it comes to the level of policy making for moderating the fertility decline. On one hand, macro-structural viewpoint refers to the potential consequences caused by low fertility problem, for instance, persistent depopulation, instability and non-sustainability of society, stagnant of economy and so forth. These problems instigate the concerns of the government that urgent actions for promoting birth giving are needed to be taken timely. The quality of life viewpoint, on the other hand, presents individual's preference and free choice in terms of their life manners that should be respected and not be interfered by any kind of outside forces. This point of view can somewhat explain the inefficiencies of current policies on fertility rate. Individuals have right and freedom to decide on their fertility choice. Government should not take heavy of demanding measures to interfere in individual decisions, except providing relevant supports or incentives. The declining fertility rate is contentiously regarded as political impotence. Although the government has quite recognized the population ageing crisis for some time and is anxious to bolster birth rate as well as labor force participation, it is rather hard and complicated for policy-makers to device an appropriate and effectual maneuver in that regard, on the prerequisite that individual decision should not be interfered.

The most noteworthy point brought up in Fahey and Speder's (2004) report is the affordability hypothesis, which argues that people make choices or decisions in life varying from what they actually want and need is because of non-affordability produced by current economic pressure. Based on the assessment of to what extend the number of children that people actually have is sync with what people really desire, Fahey and Speder (2004) indicate that the choices people make for their lives sometimes

corresponding with external availability or economic limitation; those choices seem to meet some of their needs or aims in life but they cannot realize people's ultimate satisfaction and aspiration. These choices are so called "inauthentic choices" or "unfulfilling choices". Fahey and Speder (2004) stress that having a child is one of those ultimate aspirations which is replaced by other options in life. Put it in another words, today people in the actual fact still want to have more children and larger family, however due to the non-affordability and uncertainties from economic pressures, their desire is to some extent hampered, therefore, they have a tendency to make other choices instead of decision on having a child, which is considered as an irreversible choice and may generate many costs and uncertainties. Consequently, the fertility rate is declining. Other studies point out that the fertility decline is a reflection of a decline of the value of having a child to obtain individual's fulfillment (Van de Kaa, 1987; Van de Kaa, 2001; Preston, 1987; Lesthaeghe and Surkeyn, 1988). In Fahey and Speder's (2004) theory, they present that the mutual connection between supply and demand crucial for the fertility performance. Demand aspect represents the facets that how many children an individual or a couple wants, for instance, the expected expenditure of rearing a child, the available portion of income spend on a child. Supply aspect, on the other hand, stands for the impacts which lead an individual or a couple to obtain fewer or more children than they originally desire. Those impacts include unwillingness or having no opportunities to form a family, unexpected pregnancy. The proportion of supply and demand can be quite various. When supply exceeds demand, individuals and couples tend to have more children; in the same manner, if supply is behind demand, it is likely to cause individuals and couples to restrain from having the desired number of children. This thesis strives to examine the connection between demand and supply in German society, in relation with German women's fertility and employment behaviors.

Another theory adopted in this thesis is Hakim's (2006) classification of women. Based on their preference of life style, women are categorized into three groups: career-oriented, family-dedicated and adaptive. With regard to the first type of women, their primary priority in life is career or similar activities, such as policies, social activities, network, etc. Work-oriented women are committed themselves to work and ambitious to achieve higher goals in life, with family life as subordination, and many of them remain single and childless, some even stay childless after marriage. Family-dedicated women put family work and responsibilities, especially childrearing in priority; hence,

they tend to withdraw themselves from employment, stay at home to take care of the family meanwhile largely rely on their partners' income. The third group of women does not have a specific priority in terms of employment and family affair. They are more likely to combine work and family. The adaptive women can be seen as advantage for both fertility rate and female working participation and the proportion of adaptive women can be increased by family and labor policies which provide women with work-life equilibrium. In Germany, women are more approaching the first two polarizing groups. Due to many social constrains, such as lop-sided family and lobar policies, traditional gender roles and insufficient child care facilities, incompatibility between employment and motherhood is rather severer in Germany compare to other European countries. Hakim points out that when flexible or part-time jobs and related policies are not accessible, adaptive women are inclined to either devote themselves into full-time job or withdraw themselves completely from employment to take care of family work. In view of this, one can argue that it is important for policy-makers formulating apt measures to facilitate women be adaptive.

This thesis borrows Fahey and Speder's (2004) and Hakim's (2006) theory to argue that having children and career success are actually both desirable among German women nowadays however are not quite preferable due to the incompatibility between two domains. It is difficult for women to combine family life and employment in Germany due to economic and social constrains. The incompatibility of employment and motherhood put women in a dilemma, in which they are forced to choose only one side (Kreyenfeld, 2004). And each side points to one polarizing group of women. As a result, fertility rate and female labor force participation are both unfavorably developing.

A key question this thesis seeks to answer is what the connections between German women's preferences to motherhood or employment and the current social constrains are. The primary aim of this thesis is to find out whether policy-makers can draw on the connection to formulate efficient scheme for boosting fertility rate and female employment by relieving the incompatibility between employment and motherhood, and meanwhile avoiding being regarded as interfering in individual's decision. This thesis argues that to understand what people really desire, what people actually choose to do and what factors impede people from reaching their desire is considerably imperative for making suitable and effectual policies, especially in terms of moderating severe social problems, such as ageing population.

To examine thoroughly the connection, this thesis adopts a preferences-constrains framework to examine and analyze separately German women's preferences associated with having a child and participating in labor force, and the present constrains which impede German women to take preference in accordance with their actual desire. Section 3 is accordingly bifurcated: in the first subsection, women's preferences are sorted into three categories: education, age of childbearing, and opportunity cost of having a child. Social constrains are undertaken in the second subsection, which are also divided into three groups: traditional gender roles, family policy, and public child care facilities. The lack of high-quality subsidized child care facilities is particularly highlighted in this part, to which German women's incompatibility between employment and motherhood is chiefly imputed. As shall be seen further in the end of Section 3, a conclusion is drawn to summarize the connection between German women's preferences and the present constrains. This thesis suggests that the connection between preferences and constrains can conduce to provide the policy-makers with an explicit entry point to tap, in regard with formulating suitable and effectual measures to boost present negative fertility rate and work force.

Last but not least, differentials on fertility development and female labor participation behaviors between East Germany and West Germany are included in section 4. Germany was divided into West Germany and East Germany after the World War Two. Before their unification in 1990; the two parts were ruled by two distinct systems. The fertility behaviors in these two domains were therefore quite various. From looking at the variations on fertility development and female labor participation between East Germany and West Germany, this thesis suggests that to tackle these issues, different measures should be carefully taken into consideration.

A further discussion is mooted after conclusion with regard to the necessity and possibility of a family-friendly policy for the European Union in aggregate.

### 3 Preferences and constrains

Fertility decline is such a fraught issue placing in front of German society. It is a glaring threat to the country's economic and social development. Germany is named as a very prominent case of a highly developed country with two demographic challenges (Haan and Wrohlich, 2009) --- disconcerting fertility decline and fairly low female participation in the labor market at the same time. Women in Germany are likely to be categorized into two polarizing groups --- family-dedicated and career-oriented. Adaptive women, described by Hakim (2006) as women who can combine both work and family, are in general considerably rare in Germany due to the high incompatibility between employment and motherhood which is frequently imputed to quite lop-sided family and labor policies, traditional gender roles and insufficient child care facilities. The mismatch (Fahey and Speder, 2004) of women's choices and their actual desire is presumably very high in Germany. This section is mainly bifurcated into women's preferences and social constrains. The connection between these two parts is examined in order to see whether it can be tapped by policy-makers to formulate suitable maneuvers for boosting both fertility rate and female labor participation.

#### 3.1 Preferences

"Female emancipation", women's present social statues, their positions in labor force in particular, are considered as a prominent factor of the persistent fertility decline since the 1960s (Lesthaeghe, 1995, Kreyenfeld, 2004). Women are provided with more choices and opportunities, such as higher education, positions in employment; as a result, they are not content with only staying at home as family carers. However, from the examination on people's desired number of children in different nations in Europe conducted by Fahey and Speder (2004) (see table 2), German women desire on average 1.73 children and their counterparts in the East Germany desire on average 1.78. It can be observed that although the desired fertility in Germany was already low but obviously still higher than the actual average fertility rate of around 1.4. Hakim (2003) argues that lifestyle preferences play a key role in determining women's choice between family work (motherhood) and labor work. According to Hakim (2006), a preference



theory is an approach for describing and forecasting women's preferences to paid work or family life; it can be used to state, empirically, the actual choices women make in reality. Women are various in their choices and priorities in terms of family and work issue, therefore they are subject to be categorized into distinct groups --- work-oriented and family-dedicated. The preferences discussed in this thesis refer to women's choices that are affected by external factors such as accessibility, incompatibility, availability, affordability to name a few, not the choices by women's inherent desire. The difference between women's preference and actual desire should be clearly differentiated here. Three main factors determining women's preferences in relation with fertility and employment are frequently argued: education, the age of child conceiving and women's high opportunity cost of having a child. These three factors are discussed as follows:

### 3.1.1 Education

Fertility decline has been frequently considered to be accordance with maternal education rises (Rindfuss et al., 1996; Isen and Stevenson, 2010). When it comes to Germany, the western part in particular, "Female employment and education should be negatively associated with fertility" (Kreyenfeld, 2004). The level of a women's education has been named as a major element for the postponement of fertility (Marini, 1984; Rindfuss et al., 1996). However, Heiland et al. (2005) rejects the consumption that high-educated women want less children, on the contrary, from the result of their case study of the West Germany, women with above-average education also desire three or even more children. Women with higher education want to have more children, but prefer to postpone their conceiving time until they have obtained a quite stable position in employment (Liefbroer and Corijn, 1999; Brewster and Rindfuss, 2000), because they tend to believe an income effect that high education can normally qualify them to be engaged in a well-paid *métier* and ultimately enable them to support a relatively bigger family in size with the certain number of children they desire (Rindfuss et al., 1996; Heiland et al., 2005). However, once they have obtained a stable *métier*, they come to realize it is rather difficult to have a child due to the incompatibilities between employment and motherhood in Germany, where the traditional "male breadwinner" idea and the poor provision of full-time child care facilities is well known. Women may reckon that their career prospect will be hindered by having a child at an earlier age (Freyenfeld, 2004). Therefore, most of them with stable jobs and higher earnings prefer to refrain from motherhood temporarily (Becker, 1993).

From an economic point of view, higher educated women is considered as an “investment” in human capital conducive to the labor force (Mincer, 1974), as high educated women are generally equivalent to female labor participations. The increase of higher educated women is in a tight connection with the increasing female participation in labor market (Hara, 2003). However it is also largely presumed to contribute to the continuing fertility decline (Kreyenfeld, 2004). Women are therefore always put into a fair dilemma that they have to choose between work and family, as motherhood and employment are generally regarded as two exclusive alternatives in Germany (Kreyenfeld, 2004). However, as the female emancipation ongoing, women are entitled with much equal high education and opportunities in labor market; as a result, they are at the same time needed by both the two alternative positions. On the one hand, with the persistent fertility decline, women with high education are the first to be imputed to this problem if they choose employment which can realized their education in preference to motherhood (Dorbritz, 2008). On the other hand, since at present the population in Germany is continuing ageing, the proportion of labor force is accordingly declining. The society is in great need of increasing female labor participations.<sup>14</sup> Therefore, nowadays the double-responsibilities are especially alighting upon high-educated women’s shoulders.

Dorbritz (2008) remarks on this phenomenon:

(...)despite changes in participation by women on the labour market, most of the domestic work continues to be carried out by women. The change in the gender roles has taken place asymmetrically, i.e., only on the part of women. While housework and childcare have remained central tasks for women, gainful employment outside the home has been added to this.

The double-burden can be seen as the major reason for German women divided into two polarizing categories --- career-oriented and family-oriented (Hakim, 2003). Women either choose to engage themselves in their *métier* and stay childless so that their education can be paid off and they have more flexible time and energy to pursue their goals, or women choose to stay at home to take care of family responsibilities, especially for childrearing, at the cost of giving up the chance to put their knowledge

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<sup>14</sup> Steffen Kröhnert, head researcher at the Berlin Institute for Population and Development, pointed out that a stable working population is crucial to the economic growth in a country; however, the population is persistently graying in Germany. Effective innovation, pertaining to child birth as well as labor force, is penurious. Kröhnert further suggested that encouraging more eligible people, especially women, to work in the labor force is one solution to prevent the country from being deficient in strength that nudges development both economically and socially  
Information is from Deutsche Welle: <http://www.dw.de/dw/article/0,,16083737,00.html>

into practice. This is also similar with Kreyenfeld's (2004) "incompatible life domain" framework, which argues that due to the incompatibility of employment and motherhood, high-educated or work-oriented women tend to stay at work with no child while low-educated or family-oriented women prefer to take care of children and family at home.

However, this is not completely the case in reality. Researches show that women with low education or relatively lower level of jobs also have considerably low reproduction. Women with higher education, who are likely to be in career-oriented type, have more capability and chance to be engaged in a better job, from which they have more earning to support a larger family. However, due to the fact that it is hard to make paid work and domestic work compatible and the hope that their education and capability can be paid off in working area, high educated women tend to first opt for their career (at least at early age) in preference to having a child. Köppen (2006) also points that women with high education may tend to devote themselves to births giving in a sequential and fairly shorter period of time in order for them, after procuring their wanted family size, to return to their *métier* as soon as possible. However, this is not quite feasible in Germany as public child care facilities are not widely available and easily accessible, after women have young children, they can hardly find a place which provides full time cares for their children, so that they can come back to their former employment. Women with relatively lower education, most likely to belong to the family-dedicated category, may have more time and energy for more children, but their choices are restricted by financial shortage. Women with low education level may encounter fewer chances to obtain high paid job which disenable them to afford a larger family, therefore they may have to choose have child(ren) fewer than they desire or they may choose to forego having children, instead, resuming higher education (Kreyenfeld, 2002). Kohler et al. (1999) also argue that there is little evidence proving one's educational attainment having dominant influence on the fertility behavior. Besides, from recent result of Braakmann's (2011) research, more education in Europe can in fact increase birth rates. The argument that women's high education and ambitions on jobs are imputed to low fertility rate is not quite feasible.

In recap, the level of women's education cannot really determine women's preference towards fertility or work. For high-educated women, under the pressure of double-burden, they are forced to choose either work or child(ren) due to the incompatibility of

work and motherhood; while relatively low-educated women though are more likely to choose more children but their choice is restricted by insufficient financial support. It is the incompatibility of employment and family life that renders high-educated women likely to opt for careers first. From recent statistics provided by Federal Statistical Office, women's age of giving first birth have certain impact on the number of children they will have. For women with education level of university or doctor's degree, they tend to have only one child when they give first birth after 30 years old; and for women with lower education level or only apprenticeship and job training, if they have their first birth around 25, they are more likely to have 3 or more children, while if they give first birth after 28, they more remain one child. The age of women's childbearing is also a key impact on fertility and female labor force participation behaviors.

### 3.1.2 Age of childbearing

Germany is among one of the countries with smallest size of family ideals and the largest proportion of young women who prefer to have no child (Fahey and Speder, 2004). In recent decades, the ideal two-child family formation is weakening, as more and more young people prefer to have even smaller sizes of family (Goldstein et al., 2003, Breton and Prious, 2005)

According to federal statistical office, two determinants for fertility development are the age at which women give births and the number of children per woman have. Today the age at which women give birth is increasingly higher than in the past. The number of women aged below 30 years who give births is declining meanwhile the cohort of women aged 30 or above have more children than before. In the western Germany, the age of women to have a child has increased on average 1.8 years from 1990 and 2008, with the fertility rate declined during the same time; while in the eastern Germany, the average age at birth has increased significantly by four years from 1990 and 2008 (Federal Statistical Office, 2009). Four decades ago, in West Germany, women who had their first birth at the age between 30 and 40 was only 16%, however, in 2004, the proportion had reached nearly 50% (Federal Statistical Office, 2006). Many researches have shown that countries with low fertility rates are not necessarily due to high level of childlessness; nor because of women's postponement of childbearing, but the "degree to which women go beyond the second child and have a third or fourth child" (Fahey and

Speder, 2004, Bavel and Rozanska, 2010). Particularly for high-educated women, Bavel and Rozanska (2010) find out that in countries where high-educated women have higher second birth rate, the total fertility rate is likely to be higher and in the same manner, if women with high-education have lower second birth rates than women with low education, the total fertility rate tend to be low. They also present that although the systems and situations are quite varying in different European countries, it is a common feature that when the first birth gives by the timing which is culturally regarded “expected” and “normal”, the second birth rates are usually higher.

Kohler et al. (2006) suggest that the influences of delayed first births rate on second birth rate are primarily obvious under the circumstances of stiff labor markets and lack of child care service in the society. When facing the double burden of work and family responsibilities, women may find it rather risky to have another child. Bavel and Rozanska (2010) also stress that child care facilities is important for second birth rates. Higher enrolment in child care is tightly in relation with high second birth trend. However, they point out that this only works for women with higher education or career, for they can better afford the cost of child care, at both public and private basis. However, for women with low education, due to poor provision of full-time child care and the price for private day care beyond their affordability, they tend to have no children or one child so that they can cope with life and, if not full-time, part-time job.

In Scandinavian countries: It seems that women who have their first birth at an older age tend to squeeze their next birth closer than women who have childbirth at an earlier age. Highly educated women are inclined to have higher later birth rates, especially shortly after the postponed first birth, so that they can soon return to their employment. However Kreyenfeld (2004) argues that it is not quite convincing in the case of Germany, because in Germany, the main problem is the incompatibility of work and family. Even though women squeeze the interval time and have their desired children, it is very difficult for them to resume employment. After comparing the second births behavior in Germany and France, Köppen (2006) concludes that the reason for France has higher female participation in labor force as well as higher second birth rates than Germany rests on that facts that in France, compatibility between employment and family life is highly supported by incentive policies and widespread free or subsidized child care facilities, whereas Germany still follows lopsided traditional family format which can be reflected from policies, with poor provision of child care. It can be seen

from above that the determinant of women's preference for the age of first birth as well as whether to have second child are strongly influenced by compatibility of family and work life provided by relevant welfare and policies.

### 3.1.3 Opportunity cost of having a child

As mentioned above, work-oriented women are not only devoted themselves into employment but also other social activities and options, of which women are highly likely deprived when they have children (Hakim, 2006). This loss is generally considered as opportunity cost of having a child. The direct cost of having a child comprehends expenses for housing, clothes, food, child care, transportation, school, further education and so forth (Kreyenfeld and Hank, 2003). It depends on a family's financial situation, individuals' income and external costs on related accounts in the society. The opportunity cost<sup>15</sup> of having a child refers to apart from the direct cost of rearing a child, the other cost with regards to the time spending with the child and occupations (Becker, 1991; Laroque and Salanie, 2005). Fahey and Speder (2004) opine that women (which also applies to men) choose to have smaller size of family with no child or fewer children in order to allocate more energy and time on other options and benefits in life. As rapid development of economy and society, people at present obtain in general more income than those in the past, which theoretically can mean higher financial ability to afford more children. However the persistent fertility decline signifies people's tendency to opt for other options of allocating their extra income than having a child. Fahey and Speder (2004) present two theoretical problems on how people nowadays choose to spend their extra income: first, they are more likely to concentrate the extra income on one child, by giving the child additional investment instead of spending money evenly on more than one child. This can also be seen as people at present hold more value on quality rather than quantity when it comes to rearing a child; secondly, people often pay their extra income for the other options in life, such as social activities, advanced merchandise and higher education or ambitions.

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<sup>15</sup> The definition of opportunity costs: 1). The cost of alternatives that must be forgone in order to pursue a certain action. Put another way, the benefits you could have received by taking an alternative action. Definition from investopedia: <http://www.investopedia.com/terms/o/opportunitycost.asp#axzz24vRZaCDQ> 2). The money or other benefits lost when pursuing a particular course of action instead of a mutually-exclusive alternative; Economics: The benefit that could have been gained from an alternative use of the same resource. (definition source from: <http://dictionary.reference.com/browse/opportunity+cost>) The costs are not restricted to monetary or financial costs: the real cost of output forgone, lost tie, pleasure or any other benefit, value that provides utility should also be considered opportunity costs.

This can explain why with the development of life standard, people's preference for parenthood, instead of getting positive, is less than before. With the rapid development of economy, people don't need to worry about as much financial problem as before, but they put more attention to the spending of their time on increasing social options (Fahey and Speder, 2004; Becker, 1991 and Easterlin, 1978). Especially for women in developed society, women emancipation has led to a great change in women's social status, which increased female participation in labor market and enhanced women's awareness of other life options apart from being only "housewives" or "mothers". They have been provided with more and new options to spend their time and energy (Becker and Lewis, 1973, Willis, 1973).

As Fahey and Speder (2004) point out that:

(...)women today cannot 'afford' to have children as their mothers and grandmothers did; but this is only true in the sense that the other options available to them are so rich and attractive that the loss entailed in sacrificing those options for the sake of family formation is greater than anything experienced in precious generations.

The opportunity cost of having a child for working women or women with high education are even higher (Freyenfeld, 2004), especially in those countries without proper family policies and sufficient child care facilities to provide women with compatibility of parenthood and social life, therefore they are more likely to stay childless or postpone child birth on this account.

However, it cannot be denied that children can also provide individuals with certain incomparable values, happiness and social opportunities in terms of networking, emotional satisfaction, personal fulfillment (Schoen et al., 1997; Huinink, 2000). And it is not impossible to have children at the same time enjoy other opportunities. One prerequisite is a must on this account that individuals are enabled by proper public policies or external facilities to balance the life with children and their other social lives; otherwise, having a child can only produce higher opportunity costs in many social aspects.

From what mentioned in this subsection, it can be concluded so far that women's education level, age of childbearing and opportunity cost of having a child are playing more or less influence women's choice of whether to have child or stay at work. But the kernel reasons for why women prefer to choose to either completely dedicate

themselves in family affairs, or devote themselves to employment is due to incompatibility of family life and employment in Germany. The incompatibility is derived from many social constraints and largely considered as a result of the ineffectiveness of family policies.

### 3.2 Constraints

Men and women's attitude change and social role as well as government policies and measures in relation with family and labor pose significant impact on reproduction and female participation in labor force (e.g. Rindfuss and Brewster 1996; McDonald 2000). Germany is always named as a typical "conservative welfare states" (Esping-Andersen, 1990), holding up a traditional "male-breadwinner model" with men as the main earners in the family while women as the housework and childrearing taker. This traditional idea is not only ingrained in the society, but is also supported and reflected by policies. The most noteworthy reflection is the considerably lack of provision of subsidized child care facilities in Germany, West Germany in particular. Esping-Andersen (1999) indicates that favorable opportunities provided by government for facilitating the counterpoise of domestic work and paid work are widely acknowledged to be associated with positive fertility rate and favorable female labor force participation. The lack of public child care facilities is considered as a great contribution to the incompatibility of women's work and family, which leads to the polarizing groups of women. People's choices are malleable by different incentives and outside factors (Levitt and Dubner, 2005), therefore, this section focuses on the social constraints which are likely to restrict women's preference for combining motherhood and employment

#### 3.2.1 Gender roles

Esping-Andersen (1999) points out abominable fertility behaviors appear more in those societies which still hold the idea of men as the breadwinners while women as the family carers. While in the other countries in Europe family policy focusing on gender equality is highlighted for a long time, Germany unchangingly complies with a male-breadwinner model (Dorbritz, 2008). The traditional idea of male partners taking the responsibilities as the breadwinners; while women stay at home for the family and their children is in general still much rooted in the society (Sainbury, 1999; Köppen, 2006).



Women's entitlements (as citizens, workers, wives or mothers) are considered to be strongly influential to their acceptable status in both society and family (Sainsbury, 1996). German women's basic entitlements are often quickly switched into wives after marriage, and the entitlement of mothers will be added after first child birth (Legg, 2006). Many debates have been raised in regard to whether the traditional home childrearing is more beneficial and irreplaceable or public day care fits more the current society. Some argue that children are better educated by their parents, especially mothers, while others consider public child cares can cultivate children's ability of socialization from a young age. In Germany, rearing a child is regarded as a very important responsibility. Mothers are still sometimes labeled as 'Rabenmutter' -- the German-English translation of this word is 'uncaring mother' or 'bad mother',<sup>16</sup> which literally means 'raven mother'. It is a rather disapproving term to describe German mothers who send their children to day care, nurseries or some other same kind of child care institution in order to return to their paid work.<sup>17</sup> Even women themselves are convinced by the thought that children under three years should better be around their mothers (Fagnani, 2002). Therefore, women are forced to be under considerate social pressure and carry too much responsibility when they step into parenthood with the title of "mothers". These pressure and responsibility are great impediments for women, especially with high education or stable job, to decide having a child, or giving birth at an early age. According to Fahey and Speder (2004), "couple-formation" is a most common cause for women having fewer children than they want to have, which can be seen as "supply undershooting demand". Another influential factor is women's partner involvement (Keim et al., 2009). Their family partners' engagement in *ménage* and childrearing can to a certain degree help women alleviate their double burden from paid *métier* and household work, especially for high educated women or women with a full-time job. However, in Germany, housework and childrearing are largely considered as the part played by female role; while the major role of men after marriage is the first earner who provides the main financial support for the family.

Lewis and Ostner (1994) describe Germany as a country with strong male-breadwinner model on account of its economic support for husbands and fathers as the earners in the

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<sup>16</sup> Translation of Rabenmütter is from:

<http://dict.leo.org/ende?lp=ende&lang=en&searchLoc=0&searchLocRelinked=1&search=Rabenmutter>

<sup>17</sup> Information is from: <http://www.bbc.co.uk/news/business-12703897> and <http://schott.blogs.nytimes.com/2010/03/17/raven-mother/>

family. Nowadays, a “Modernized male breadwinner model” has brought up to describe the current situation of women in “conservative welfare states”. Unlike traditional male breadwinner model that women as family carers staying at home and totally rely on their spouses’ income, the modernized model includes women as a secondary earner or “supplementary” earner for providing additional income, apart from taking care of domestic work (Leira, 2002). In addition, people’s attitude towards the role of first or second earner is also quite noteworthy in Germany. People who categorized themselves as the main earners or breadwinner of the family are regarded as first earners, thus their partners were secondary earners. Married men are by and large prone to identify themselves as the first earners. Contrasted with men, women, who consider themselves as first earners when they are single, are inclined to switch their role to secondary earners immediately after marriage. Moreover, both men and women identify or switch their roles as first or secondary earners of the family sometimes even in spite of the actual income level or if they are or not in employment (Hakim, 2003). Women are more likely to consider themselves or be considered as the secondary earners which take care of the family and provide added income if possible or necessary. This lop-sided attitude creates different disincentives for women from different educational level. It renders women with high education and promising career disinclined to give birth and abstain from their work; while for women with relatively lower education or work-oriented, they are more likely to choose to withdraw themselves from employment and dedicate themselves in family caring. One can argue that this traditional idea contributes to the incompatibility of work and family life in a psychological and social perspective. Köppen (2006) also points out that this traditional family idea and gender roles to a great extent contribute to the polarizing categories --- career-oriented and family-dedicated. It leads to women either opt for fertility, or work, as a result, neither the fertility performance nor the female labor force participation is developing favorably.

Countries which hold up more liberal attitudes towards the equal gender roles and female labor participation in labor market, especially women with little children in employment would have relatively more female employment rate than the countries with traditional “male-breadwinner” attitude (Matysiak and Steinmetz, 2006). Along with the ongoing of women emancipation movement, the old traditional attitude in many other European countries has been changed and relevant labor and family policies have been formulated for equal gender roles in both economic and social areas. In

Scandinavian countries, under their “family-friendly work policies” and “dual-earner system”, such as proper parental leave and public child care for all age children, a family’s wellbeing is regarded tightly in line with the stable situation of both partners’ jobs (Ellingsæter and Rønsen, 1996; Andersson 2000). Therefore, the social pressure for women is much moderated. Women are encouraged and supported to be equal earner in the family as well as have children. Therefore, the fertility performance and labor force participation of women are propitiously balanced. In view of this, it can be assumed that a suitable family policy is important to alter people’s traditional attitude, especially the lopsided male-breadwinner model, and facilitate women to reconcile employment and family life.

The family policies in Germany, however, since the old FRG period, have been supporting in a way the traditional male-breadwinner model with the principle “relational obligations are prior to individual rights” (Ostner et al.). Its welfare state is largely considered as a typical conservative welfare regime. Male-breadwinner phenomenon seems to have become a steady part of current policy (Wersig, 2006). Thus, in the following section, Germany family policy is examined to see in which way and to what extent the policy creates constraints for women to combine work and family life.

### 3.2.2 Family policy

Welfare states and family policies are argued by many that affect and structure women’s labor work and family life. The behaviors in fertility and female employment in one country are strongly associated with its welfare state and family policies. Suitable and effective welfare and policies are conducive to disburden working women in many aspects and facilitate them to achieve desired number of children as well as other aspirations in life (e.g., Esping-Andersen, 1999; Köppen, 2006). An effective pronatalist policy would be those that reduce the postponement of childbirth, by providing sufficient and appropriate child care facilities, financial incentives and flexible working hours and so forth (Lutz, O’neill and Scherbov, 2003). Stier et al. (2001) and Gambles et al. (2007) suggest that countries with “work-life” balance policies are more likely to boost female participation in labor market. Compare to countries with low fertility rate in Europe, Scandinavian countries are commonly selected as role model of suitable and effectual family policies, especially with regard to women’s labor work and family life.

Adaptable parental leave, income replacement, sufficient public child care for children at all ages as well as individual taxation are extensively supplied by Scandinavian governments (Freyenfeld, 2004). With proper family policies provided by the government, such as flexible parental leave regulations, adequate subsidized child care for children at all ages, female participation in labor force may not be regarded as an impediment for reproduction, but rather an advantage for the society's labor force.

Fahey and Speder (2004) remark on the significance of welfare state that:

(...)The character of the welfare state is especially important: family/child/gender related policies, the generosity of social services, the availability of part-time jobs and the monetary programmes supporting parents/mothers could strongly shape patterns of family and work reconciliation, and the employment opportunities of mothers/parents.

German government is facing a dilemma when it comes to the severe fertility problems: on the one hand, the fertility rates have largely and persistently dropped to a gravely low level in Germany. This alarming low Fertility rate has caused many to fret about the jeopardy which further depopulation may put the society in. The sustained development and stability of a society in a long run cannot be ensured without a robust population. Needless to say that in present Germany not only the new baby born is increasingly greying, life expectancy is continuing expending, which means fewer future labors to support more senior people. Therefore, it is urgent for the government to formulate timely and efficient scheme to raise fertility rate. On the other hand, fertility control is in Europe considered to be a quite private matter which depends on individuals and wherein the government should not intervene. With the women's liberation movement ongoing for many decades, the ability to choose give birth is one of the major preconditions of women's emancipation. Fahey and Speder (2004) point that low birth rate sometimes can be seen as a repercussion of free choice which is extremely valuable for Europeans. Furthermore, according to Hara (2003), the pronatalitic policies in Germany are still restricted and sensitive because of the abominable memories under the Nazi/regime when the pronatalitic policies were associated with racial discrimination. Hence, the German government has been reluctant to take any strong action on this account, apart from some inefficient measures such as supplying subsidy to maintain traditional marriage and family model with men as the main breadwinners and women

as the main family carers (Köppen, 2006; Dorbritz, 2008). Taxation and parental leave are considered as two primary aspects in family policies in relation to influence on people's choice on fertility, and in Germany they are regarded as two ineffective measures government has been taken, rather than support women's compatibility of work and family life, they strengthen the male-breadwinner model in Germany and to a degree lead women to choose to go 'polarization'.

- Taxation

In the period of 1980s, many countries more or less amended their taxation system in order to ease the burden of women at home (Dingeldey, 2001), nevertheless, West Germany has still maintained the same system. After the demise of the communist regime, the old favorable taxation system in the former GDR was completely replaced by the western taxation pattern (Kreyenfeld, 2004). The current taxation in Germany, known as joint income taxation, allows married couples to register taxes together and use income splitting (Haan and Wrohlich, 2009). In comparison with other developed countries in Europe, Sainsbury (1997) describes the current taxation system of Germany "the most severe penalties on a working wife". It is claimed to be singularly beneficial for married couple and family in which one of the couples is not in employment or in only part-time employment (Köppen, 2006), and in most cases it is women who are the one out of full-time work. This taxation system is criticized by many for quite some time, on account of its alleged disincentive effects on labor force participation and support for the male breadwinner model (Köppen, 2006; Steiner and Wrohlich, 2006), in particular for the secondary earners in the family which usually rest on women (Haan and Wrohlich, 2009). "The principle of full income splitting locks women in a family trap, as it imposes high marginal tax rates on second-earner wages" (Bonin and Euwals, 2002).

- Parental leave

Germany possesses one of the longest and most expansive parental leave systems in Europe, with maternity leave of 14 weeks (6 weeks before childbirth and 8 birth afterwards) and a three-year parental leave during which the one who stays home to take care of the child is guaranteed with keeping his or her job (with 98 percent of those are women on leave) (Beblo et al., 2009). Though fathers and mothers are both entitled with

parenthood, mothers are the primary recipients who accept the family work as dominant responsibility (Spieß and Wrohlich, 2006).

Theoretically, parental leaves are expected to encourage and support female participation in labor market after births, by enhancing the women's attachment to work and facilitating them return to employment (Hofferth and Curtin, 2003). However, the expansive parental leave in Germany is claimed to lead women with younger children to detach from their work (Gustafsson et al., 1996). A number of incentives for boosting family have been also introduced in terms of partner's involvement, including a whole-year subsidy for one of the parents who opts to stay home to attend the new born child 67 percent of his or her income. This step aims to stimulate fathers to take part in childrearing and housework. It seemed to have somewhat impact as after this incentive was introduced, more fathers have chosen to stay at home for the first year after their child is born than before. However, mothers are in general still the major family carers as men on average earn more than women in labor force. Besides, it is much beneficial for women to stay at home with 67 percent of their incomes when they earn less than their partner.

Mothers are facing a possible loss of capital as a result of that the parental leave does not provide full income replacement and also influences mothers' other options of welfares and wage at work (Bussemaker and van Kersbergen, 1994). Empirically, women with children generally receive lower wage than women with no child (Beblo et al., 2009). Beblo et al. (2009) find that women's wage is reduced by 16 to 19 percent after first birth. Two results from Ejrnaes and Kunze's (2012) finding also show that first, the number of women who return to work after childbirth is very low, with only about half of them resume working; second, the wage is regressed compare to before childbirth, which is even more salient among women with average or relative low education. Some earlier researches have even revealed that the wage of West German women drops about 10 to 20 percent after birth giving (Ejrnaes and Kunze, 2004; Schönberg and Ludsteck, 2007; Beblo et al., 2009).

Besides taxation and parental leave, German government also provides other measures in order to boost fertility rate such as a children's allowance (known in German as "Kindergeld"). Since 2010, this allowance grants each first child or second child 184 Euro per month, the third child 190 Euro and the fourth or more 215 Euro monthly,

which is valid for each child until they reach 18 years old.<sup>18</sup> This allowance aims to encourage couples to have more children and disburden them with cost of having each child. However, given that women can resort little to the family policies for compatibility of domestic work and labor work, in addition to what mentioned above about the double demands for women in these two domains, preference to having a child in Germany can be regarded as women's "decisive competitive disadvantage" (Dorbritz, 2008). Therefore, it is imperative for the government to formulate measure that can actual take effect on lessening the male-breadwinner model and facilitating women to make employment and family life balance, so that they are able to combine two aspects. In recent decades, the availability of child care facilities has been brought into discussion in terms of the impact and function it can produce on women's compatibility of employment and family life.

### 3.2.3 Child care

Many have argued the significant role that child care facilities play in terms of moderating incompatibility of women's employment and motherhood. Scandinavian countries and France possess relatively higher fertility rate and female labor force participation. And their achievement has been attributed to their attention to the well and wide established child care facilities. In Scandinavian countries, parents send their young children to the renowned public childcare or preschool system; therefore women have the opportunity to resume their careers after maternity leave. In France, high-quality and free preschool (*ecole maternelle*) for children above three years old is easily accessible and provided by the Minister of Education (Kramer, 2012).

However in Germany, the flexibilities of labor supply associated with child care are fairly low. In most of European countries, child care facilities for children under three have been increased over the years, however Germany is not one of them. West German part in particular, is known as possessing poorest availability and utilization of child care among EU states (Kreyenfeld, 2004; Dorbritz, 2008). The peculiarities of German child care are that state-funded child care is limited for children below three years ---

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<sup>18</sup> Information from Bundesministerium der Justiz: [http://www.gesetze-im-internet.de/bgb/\\_187.html](http://www.gesetze-im-internet.de/bgb/_187.html)

there are *Kinderkrippe* available only for 3% of children under three (Köppen, 2006), and full-day child care for children aged from 3 to 6 is also rare in Germany, while private child care is not sufficient either or only obtainable with a markedly prohibitive price (Wrohlich, 2006). The formal child care for children aged 3 to 6 is considered as preschool education rather than a day care where take care of the children whose parents are working. Therefore the formal child care in Germany is mostly only part time, approximately 3 to 4 hours a day, without provision of meal (Köppen, 2006; Ejrnaes and Kunze, 2012). Köppen (2006) finds that the child care pattern in Germany is even difficult for women with part-time employment. Working mothers have to turn to informal help, such as babysitters or relatives. This phenomenon is particular observed in West Germany where mothers have very little accessibility to state-funded child care facilities (D'Addio and D'Ercole, 2005).

Although Germany is named as one of the several countries with poorest provision of child care facilities in Europe, the variation of which between the West Germany and the East Germany is quite glaring. The availability as well as usage of child care facilities, particularly for children under three years old, in the eastern part has been higher than the western part since the GDR period (Kreyenfeld, 2002; Hara, 2003; Wrohlich, 2004). Full time child care for children above three in the East Germany consists of approximately 97.7 percent, while only 18.8 percent in western part (Wrohlich, 2004). The child care facilities for children from three to six (school age) is usually part-time (around 3 to 4 hours) in West Germany, on the account of that child care is widely considered as simply preschool education, rather a place for providing parents the opportunities to go back. Besides, due to traditional concept, children are deemed better cultivated with their parents, especially with mothers. As mentioned above, women are named “Rabenmutter” if they send small children to day cares in order to return to work. This concept is peculiar strong in the West Germany. Given that high-educated women who want to utilize their knowledge and skills in employment cannot resort to the family policies for help with reconciling work and childbearing (Dorbritz, 2008), they have to relinquish having a child for accomplishing their ambitions in early life. Steffen Kröhnert reconfirmed the point that one of the biggest reasons for German women having no child or late birth is because of insufficient and



unsatisfactory child-care facilities run by the state.<sup>19</sup> The availability and utilization of child care facilities is higher in East Germany are considered as one of the major contributions to higher labor force participation of women in East Germany than the West Germany (Wrohlich, 2004).

The availability, high-quality and affordability are regarded as three major facets of child care facilities, which is argued by many as a key mean of a nation's family and labor policies (Wrohlich, 2004; Muehler, 2008), in order to make parenthood and employment compatible 支持点.

- The availability of child care facilities

Higher enrollment of younger children in child care institutions can be tightly connected with higher female participation in labor market. The availability of child care plays a role in mothers' employment decision (Wrohlich, 2006). Wrohlich (2005) states that dearth of subsidized child care contributes to both low fertility rate and low female participation in labor market

In 2006, public child care facilities for children up to three years are available only for 8% in the western Germany (Wrohlich, 2007). In recent years, scheme on the establishing more child care facilities in Germany have been widely formulated (Wrohlich, 2004). Many researchers also demonstrate the significance of child care availability. Kreyenfeld and Hank (1999) and Spieß and Büchel (2003) point out that the availability of child care should be mainly centered on rather than on its affordability, in terms of the impact of child care on female participation in labor force. They accent that for the case of German child care facilities, "Individual behavior might be less influenced by the affordability of day care but by its availability". Wrohlich (2005, 2008) finds that great amount of public or state-funded childcare in Germany is demanded, particularly the child care facilities for younger children. From her study on labor supply and child care choices in Germany, Wrohlich (2006) also suggests that to help dual-earner parents to balance employment and parenthood, building up more subsidized formal child care facilities can be a measure for the government to take.

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<sup>19</sup> Sources is from Baby Gap: Germany's Birth Rate Hits Historic Low published by TIME:  
<http://www.time.com/time/world/article/0,8599,1991216,00.html>

In East Germany, with the relatively widespread child care facilities established during the communist period, the participation in full-time employment of women is traditionally higher than in the West Germany. In West Germany, due to the dearth of full-time child care, especially for children from three to six, mothers who want to work are more likely engaged in part-time jobs. Steinmetz (2006) stress that those women who mainly take part-time employment are more from the countries which fail to provide suitable family policy for supporting female labor force participation, especially fail to facilitate reconciliation of women's paid work and family work. The best and most efficient way to reduce incompatibility between paid work and family work is to supplying more institutions and centers for child caring. Bavel and Rozanska-Putek (2010) find that the availability of child care facility influence the behavior of second birth.

They remark that:

(...)childcare availability may be an important determinant of the opportunity cost of parity progression, particularly for the highly educated women. In countries where a large share of young children is enrolled in formal childcare, the higher educated exhibit substantially higher second birth rates. Childcare does not make any difference for the second birth rates of the women with a low level of education.

The major reason for the less influence of child care facility on the births rate for women with low level of education is that they are more likely to be not able to afford the price of child care. Therefore, many scholars also argue that the affordability is not less important than the availability.

- The affordability of child care facilities

Increasing availability of child care facilities has been outlined in German political agenda in recent years (Wrohlich, 2004), however the price is found quite higher (Haan and Wrohlich, 2009). Especially the price of private child care institutions is sometimes exorbitant. Child care costs have significant effects on female participation in labor market after childbirth. The higher child care costs are considered theoretically to entail a corresponding decline of female participation in labor force, especially for low-educated women with younger children (Wrohlich, 2004), on the account of that they are not able to afford high price. It can also be regarded as what Kreyenfeld and Hank (1999) have put it that "higher costs mean higher disincentives". When pondering

whether to have a child or not, parent will put not only the availability but also the affordability of child care into consideration. Reasonably and expectably, high cost of childcare facility is seen as a disincentive for parents to choose having a child, which is detrimental for the fertility. Furthermore, even though there is enough room provided in child care for young children, the high cost may impede parents to send their children; in most cases, mothers in the families have to withdraw themselves from work and take care of children at home while fathers are traditionally the breadwinners. Thus, the female labor force participation is affected negatively. It is clear that the affordability and availability are equally significant for both fertility and female employment. From empirical studies, Wrohlich (2004) reveals that advisable subsidy of child care costs conduce to raise labor participation of mothers. Therefore, raising public fund for more child care facilities has considerable impact on the need for child birth and on female participation in labor markets.

- The quality of child care facilities

Not only that the provision of child care facilities is rather insufficient, the attitude of German parents towards sending their children (especially under three years old) to kindergarten or full time child care institutions is quite negative (Fagnani, 2002). Many parents consider that children's emotional and social development is better taken care of by their fathers and mothers (chiefly referred to mothers) rather than someone else. Undoubtedly, the experiences children gain in the first three years of their life shape the cornerstone of wellbeing for the rest of their life in terms of learning, communicating, developing and so forth. A study conducted by UK childcare, focusing on children from birth to three years old, has shown that babies and toddlers are better attended by their mothers rather than child care (Roberts, 2005). Penelope Leach, the leading researcher of this study, stresses that this result does not mean an implication that mothers should stay at home to rear the children; rather, it should be interpreted as a strong demand for 'developmentally appropriate high quality childcare'. Matysiak and Steinmetz (2006) also point out that the high quality is the most crucial aspects of child care facilities, in terms of facilitating women reconciling work and family life. The wellbeing of a child's development, especially in the early stage, is considered significantly important and as paramount responsibility and obligation of parents, mothers in particular. Therefore, even if sufficient and affordable child care facilities are founded in Germany, the concern of whether the child care is qualified enough for rearing children properly will

also hinder parents' preference for sending their young children to child care centers. Without a guarantee of high quality of child care facilities, rearing children at home with mothers is still more preferable.

From aforementioned, it is obvious that child care facilities play a crucial role in the compatibility of women's employment and family life after child births. Availability, affordability and quality, the three aspects of child care facilities are equally indispensable and important on that account. Deficiency of any of them will cause either fertility decline or low female labor force participation. Therefore, when formulating the scheme in terms of increasing availability of child care facilities, whether it is within parents capability of affording should be included into consideration, as well as the quality of it, such as snug and secure environment, well trained nurseries, proper outside activities and programmes for children's socializing development and so forth.

Gustafsson and Stafford (1995) remark on the importance of early childhood programs that:

(...)early childhood programs can promote the development of children, and—if they offer full-day child care --- they can also facilitate the employment of mothers with young children. Social policies that establish child care which is widely available, of high quality, and affordable can promote employment among women by making it significantly easier for them to hold jobs while their children are young.

The German government has been cognizant of the severe demand and dearth of subsidized child care facilities (Büchel and Spieß, 2002). A new child care reform will be launched in 2013 at the aim of facilitating parents to combine family responsibilities and work commitments. Child care facilities should cover nationwide 35 percent of all children under three. From 2013, parents will be entitled with the right to a place in public child care from the first year of their children, or corresponding child care subsidy instead (Germany, national Reform Programme 2011). Haan and Wrohlich's (2009) analyze present that for the women who are going to give first birth and high-educated women, this reform would present positive effect on both fertility rate and female labor participation. Nevertheless, this new child care reform cannot at the same time boost fertility rate and female participation in labor market, if measured in the whole population. More availability of subsidized child care facilities can be conducive to increase employment of mothers; however has little avail to the fertility rate. Therefore, child care facilities cannot be seen as a panacea on both fertility and female

labor force behaviors. Other connected measures and reforms should be taken into action together.

### Conclusion of Section 3

In this section, first of all, women's education level, age of childbearing and opportunity of having a child are included as three preferences women may take which influence both the fertility rate and female participation in labor force. It is found that the crux that determines women to go "polarization" is the incompatibility of employment and family life plus a more free control over fertility. The second subsection deals with the social constraints which is assumed as the reason for the incompatibility. Germany has always complied to a traditional 'male-breadwinner' model and it is found reflected in labor and family policies, especially in its parental leave and taxation systems; as a result, women are under considerable pressure and responsibility; in addition, since the opportunities to keep both responsibilities compatible in Germany are scarcely provided, "childrearing and women's employment can barely be made compatible" (Kreyenfeld, 2004). In the end, it is found that the most significant deficiency is the poor provision of high-quality and subsidized child care facilities, which can also be seen as a reflection of the traditional concept of gender roles in Germany. Thus, increasing availability of child care facilities is argued in this thesis as an important and necessary step that policy-makers should take in order to make women's employment and motherhood compatible; moreover, the affordability and quality of child care facilities are equally very crucial. Increasing the availability of high-quality and subsidized child care facilities is important also due to not only the fact that it is an effective measure that can encourage women combine both family life and work life so that the behavior of fertility rate and female participation in labor force can be improved, but also it is a measure taken by the government that is not imposing on people, which means it is not interfering individual's decision, rather, it is facilitating people to achieve what they really desire.

In addition, although child care can to large extents facilitate women to reconcile employment and family life. It cannot be most effective or solve the fertility and female working participation issues to the highest degree without the support and assistance of other factors such as proper family policies in terms of parental leave and taxation and so forth.

With regards to the connections between child care policies and other factors, Gustafsson and Stafford (1995) conclude that:

(...)these social forces not only shape contemporary child care policies but also influence the complementary elements of an entire system that dictates the choices facing women with young children and that determines whether and on what terms they participate in the labor market. To understand how child care policy will affect women's decisions about employment, it is important to consider the full range of incentives and barriers to maternal employment that are embedded in the nation's social system.

From analyzing women's preferences and social constraints, it is found that the social constraints mainly come from the traditional idea of "male breadwinner" ingrained in German society along with its strong reflection in family policies. These constraints lead to high incompatibility of family life and employment for women, therefore women's preferences for education, age of childbearing and other options in life are fairly affected. Due to that combination of employment and family life is nearly impossible; women are forced to forgo either work or having a child, which goes against their ultimate desired fulfillment. "Policy programmes and measures are likely to be more effective if they fit well with the ideas of those they are aimed at" (Fahey and Speder, 2004). The importance of analyzing this connection in this section is that the deficiencies existing in society which cause the incompatibility are pinpointed, which policy-makers may tap to formulate efficacious measures to tackle the problem.

#### **4. The differentials on fertility development between West Germany and East Germany**

German demography has a special feature as its quite distinct performances in West Germany and East Germany. It is important for the differentials to be issued, setting out the precise points of behavior variations between West Germany and East Germany, in order to formulate more accurate and apt measures.

Historically, after the World War 2 Germany was divided into two portions – east and west-- and afterwards the two parts were governed by two quite distinct systems in both social and economic manners (Kreyenfeld, 2004). As though ruled by different systems, the two parts of Germany both experienced a large reduction of fertility rates since the end of mid-1960s (Höhn and Dorbritz, 1995; Heilig et al., 1990; Kreyenfeld, 2004): by 1975, the total fertility rate in West Germany and East Germany fell respectively to 1.45 and 1.54, both of which were far below the replacement level of 2.1 (Lechner, 2001). Conrad et al. (1996) states that the rising number of women with no child and a decline of children per mother are the major factors for the fertility fall.

However, the demographic behaviors of the two parts started to vary after 1976, from which the East Germany managed to achieve a short period of fertility upturn while the birth rate trend in the western part was persistently negative. One major explanation for the sudden and large fertility decline in East Germany lays on its overhasty transition of economic and social pattern after the unification, which caused significant loss of incentive socialist policies in favor of compatibility of women's employment and family life.

The performance of female participation in labor market was also quite distinguished between West German women and East German women. During the period of division, the labor force participation rate of women in the old GDR was remarkably higher than their counterparts in West Germany, especially women in full-time employment. After the collapse of communist regime, although the old GDR adopted the systems and patterns of West Germany and immediately saw a sudden drop of female labor force participation, East Germany has been in general still possessing higher proportion of women employment than the west. Debates have been frequently raised that the relatively higher women employment is due to East German women's attitudes towards combination of work and family life inherited from the old GDR period, together with

the legacy of widespread public child care facilities established during the communist period.

In this section, the variations of demographic behaviors and changes between West Germany and East Germany prior to and after the fall of the Berlin wall will be described, along with several primary explanations for the unlike performances and developments. The importance to put effort into looking at these reasons for those variations between West and East Germany is significant for policy-makers to pinpoint different deficiencies in policies vis-à-vis fertility and female labor force participation in these two domains, in order to devise the most apt and effectual methods to foster fertility rate and female participation in employment.

- The divergent demographic behaviors between West Germany and East Germany from 1976 to 1990.

In the mid-1980s, the fertility rate in the old West Germany reached a record low degree --- 1.3 children per woman (Federal Statistical office, 2006), while in former GDR, a manifest upswing of the fertility rate rose from 1.54 in 1975 to 1.94 children per woman in 1980 (Dorbritz, 2008), almost reaching the replacement level of 2.1. Before the demise of GDR, more than 80 percent of women at working age in East Germany were in employment, while the proportion of those in West Germany was even below international standards (Bonin and Euwals, 2002). The achievement of fertility raise from 1975 onwards has brought up many discussions on the influence of pronatalistic policies in the former GDR (Büttner and Lutz, 1990); and many argue that the high female employment was due to the old GDR's supportive family policy, particularly in regard to sufficient availability and utilization of public child care facilities.

The first and foremost explanation for the upswing of fertility rate and higher female labor force participation in East Germany was that a series of family policies in favor of early marriages and early births was initiated in the eastern Germany from 1973 onwards under the slogan "build the Socialist Nation", by increasing more job participations of married women and developing child care facilities (Dorbritz and Fleischhacker 1995; Hara, 2003; Kreyenfeld, 2004). The pronatalistic policies introduced to the former GDR in 1976 mainly aimed to boost the fertility rate and job participations of married women (Trappe, 1995; Trappe and Rosenfeld, 2000; Kreyenfeld, 2004)). Considerable amount of measures on that account has been taken



effect encompassing birth subsidy, birth assistant, long maternity leave with salary, child premium, and reduction of mother's working hours, supports for single mothers and public day care (Schmähl, 1992; Frerich and Frey, 1993; Szydlik, 2002; Trappe and Rosenfeld 1998; Kreyenfeld, 2004). Most renowned was the so called "baby year" introduced in 1976 (in German known as "Babyjahr") particularly benefited by mothers who had second and more births (Kreyenfeld, 2004). The old incentive system entitled parents with one year free daycare for children from 1 year old above (Conrad, Lechner and Werner, 1996). Other kinds of child care were comprehending kindergarten, nursery, full-day school, weekend and holiday child care service (Höhn, 1997), which greatly facilitated mothers to balance their responsibilities at work place and at home when they return to their jobs after maternal leave. Additionally, mothers were entitled with a whole year maternity leave, combined with decent (or even uncut) income replacement, along with an insurance to return to job afterwards (Wubjkerm 1989; Kreyenfeld, 2004); married couples with children were guaranteed with local jobs, however ultimately access to outside lifestyles deviated from the family-oriented lifestyle was limited, which means there were few other options apart from the lifestyle of having larger family with more children and working for supporting the family (Conrad, Lechner and Werner, 1996). The old communist ideology encouraged utilization of potential labor force to the largest degree; hence during the old GDR period in the East Germany, female participation in full-time employment was almost at the same level as men (Matysiak and Steinmetz, 2006). Another explanation for the variations of demographic behaviors in the West Germany and the East Germany was deemed to be that individualism was practically impossible in the formal GDR, under the totalitarian regimes (Dorbritz, 2008). Individuals were complying with the rules and uniform ideology of the society, which was quite not the same in the west. Thus, the distinct demographic performances were also seen as a sensitive reaction of the two German under two different social and institutional systems (Conrad, Lechner and Werner, 1996).

It is palpable from foregoing that the essence of the old incentive policy in former GDR was to provide women with equal opportunity to reconcile domestic work and paid work when they return to jobs after giving births. Many scholars have argued that the old family police was the key to reduce women's incompatibility of employment and family life (Trappe and Rosenfeld, 2000). Notwithstanding the argument by some that

the family incentive policy adopted in the former GDR was not able to amend the fertility rate in general trend due to the slight fertility decline before the demise of the GDR (Dorbitz and Fleischhacker, 1995; Wendt, 1997), one cannot absolutely deny that if it was not those family policies, the decline might appear much worse. Kreyenfeld (2004) maintains that the family policy to a certain degree affected old GDR's fertility behavior. She points out that even though the family policies adopted in the old GDR was not the only reason for easing the incompatibility of mother's employment and family life; the comprehensive child care facilities have significantly facilitated mothers to combine two responsibilities, which indisputably contributed to relatively fertility raise and higher female participation in employment.

Unlike its counterpart, the West Germany's system didn't implement effective policies to encourage female labor participation and reproduction (Kreyenfeld, 2004). The family policies in the former FRG in general supported the traditional family pattern, with men as the breadwinners while women as the family carers (Gauthier 1996; Gornick et al. 1998; Esping-Andersen, 1999; Treas and Widmer, 2000). Married women were forced to depend on their male spouse in employment (Sainsbury, 1999). A working mother was even deemed detrimental to the growth of children (Braun et al., 1994; Scott, 1999; Stier et al., 2001) and may be addressed as "Rabenmutter" if they sent their young children to day cares. Kreyenfeld (2004) points out that the parental leave after a child birth in the former FRG was in fact lopsided for mothers, which inevitably rendered mothers' major, if not utter, dependence on their working spouses. Accordingly, child care facilities in the former FRG were remarkably in shortage. The existed child care centers were not aimed to facilitate women's compatibility of work and family, they were rather a preschool for children's early education, thus most of them were only part-time or half day (Kreyenfeld, 2004), due to which mothers could not engage themselves in a full-time job; only part time job was feasible. This can also explain that female participation in part-time employment in West Germany has been relatively high.

- The sudden fall of fertility rate and women employment in former GDR after unification

After the unification in 1990, almost overnight after the demise of the former GDR in 1990, the old incentive system for boosting birth rate was completely replaced by the Western pattern, together with other old socialist systems (Conrad, Lechner and Werner, 1996). The fertility rate in the former GDR experienced a sudden and drastic drop (see figure 4): only four years after the unification, the number of births in the east descended from 178 000 to 79 000, meanwhile the total fertility rate dropped from 1.52 to 0.77 (Federal Statistic Office, 2006). Lechner's (2001) previous studies on this issue reveal evidence suggesting that the precipitous decline of fertility rate in the former GDR after the unification was by and large due to insecurities and uncertainties produced by the unprepared and complete system transformation. In his research on the fertility change of East Germany after unification, Lechner(2001) presents that one major explanation for the plummeting fertility rate of East Germany was people's overhasty adaption to the new system. On one hand, the unforeseen and sudden changes in East Germany after reunification scarcely entitled the people with a progressive stage to prepare themselves and ease in the new pattern. East German people encountered bewildering situation entailing the loss of its old family policies. The sudden loss of financial support and assistance for birth giving, child care and mothers with jobs had undeniably affected the preference of young eastern German women to have a child (Conrad, Lechner and Werner, 1996). Furthermore, after the demise of old GDR, economic transition from the western Germany created a substantial shift in the eastern Germany, which requires more skillful and mobile employees. This shift caused significant difficulties for East German people in labor force, and for women, the unfavorable situation was even more remarkable (Pollert, 2003). The reduction of income and provisions of public services ultimately resulted in large drop in fertility and female labor force participation in East Germany.

(Figure 4 about here)

In the light of the misgiving for the instabilities of the future development in both economic and social manners, eastern German people's decisions for irreversible affairs, for instance, having a child, were made very difficult. Hence, an overhasty adaptation necessitated large and immediate drop of fertility in East Germany. "The precipitous decline of East German fertility after unification has all the features of a demographic shock: the speed, the extent, the accompanying pessimism" (Conrad, Lechner and Werner, 1996). Eberstadt (1994) states that the sudden reduction of fertility

in East Germany can be seen as a pathology during the transition period. A poll conducted in 1992 showed that men and women in East Germany tended to be even less in favor of having children than their counterparts in the West Germany (Pohl 1995). Insecurities about the changeable economic condition, uncertainties of the future development and exorbitant price of rearing a child were expressed by the eastern German as three major reasons impeding them from having a child (Conrad, Lechner and Werner, 1996).

On the other hand, Lechner (2001) points out, after the unification, on account of their own economic situation and the observation of the Western German's behavior, the East German individuals had to adjust themselves to the new Western pattern, which to some extent resulted in an adjustment to the western fertility pattern. Lechner's point can be explained here that East German women tended to observe the fertility behavior of West German women and attempted to adapt themselves into the new pattern. This point may work for explaining the fertility decline, while as for the female labor force participation behavior, Matysiak and Steinmetz (2006) argue that East German women still approach their "own way".

Unlike the sudden and large drop of fertility rate in East Germany after unification, the female participation in labor market, though lower than that in the period of old GDR, is still relatively stable and much higher than the West Germany, especially the proportion of women in full-time employment (Haan and Wrohlich, 2009). It was found that in 1991, about 64 percent of East German mothers were engaged in full-time job while only 21 percent in West Germany; the mother's participation in 1996 decreased in both eastern and western Germany, however, in the East there was still about 50 percent of mothers in the labor market while less than 30 percent in the western part (Kreyenfeld and Geisler, 2006).

It is noticeable that in contrast to West Germany, women from the former GDR are more work-oriented: they are less likely to withdraw from employment due to family obligations; moreover, they are prone to resume full-time employment in shorter time after birth giving. A noteworthy explanation for the stable higher female employment is a high orientation and long tradition of female participation in full-time employment --- the so-called "stubbornness" in East German women's attitudes towards employment that was derived from the communist period (Adler, 2004).

Adler (1997), a woman from former GDR remarks that:

(...)in the GDR, women did not have to choose between having children and work. We had both and we never questioned having both.

Many empirical studies also evidence that East German women still remain higher work-oriented, regardless the unfavorable economic restructuring and political transition (Matysiak and Steinmetz, 2006). Beckman and Kurtz (2001) show that, in 2000, about 70 percent of women in the former GDR resume their job after maternity leave, compared to around 53 percent in West Germany.

Even though the female participation in part-time employment is not as vigorous as in West Germany, it shows an increasing trend as part-time employment in East Germany is as well increasingly conducive to the compatibility of work and family for mothers with younger children. Matysiak and Steinmetz (2006) state that the increasing trend of part-time employment participation indicates an adoption of West German employment pattern, but they emphasize that the East women are “still going their ‘own’ way, and only slightly adjust their behavior to changing structural conditions” from the West. Bonin and Euwals (2002) also show the same point of view that “the communist full employment policy shifted labor supply preferences of women permanently toward participation”.

In view of abovementioned, it can be concluded that the main reason for the unfavorably large drop of fertility rate in the East Germany after unification was due to people’s misgiving about the future produced by overhasty transformation, especially the unstable economic prospect and loss of incentive policies impeded East German women from deciding on having a child. The difficulties and disincentives following the complete transition after unification are not yet strong enough to shake East German women’s performance in regard to employment participation, due to their “stubborn” attitude towards working which inherited from communist period. In short, the fertility drop and the relatively high female participation in the east can be seen as that first eastern women’s “stubborn” attitude towards employment and secondly women cannot lead a decent life without a job due to economic deficiency resulted in low wage. Having a child no doubt adds extra burden to the living, therefore, women still take part in jobs a lot but have to restrain from having a child.

With regard to present, the fertility in East Germany is still declining at an alarming rate. The dominant factor of the fertility decline still rests on the economic deficiency, slow economic recovery and people's uncertainties of the future development (Trappe and Sorensen, 2006). Therefore East German women are assumed to be inclined to lessen the uncertainties in life, by choosing to have no child or postpone the childbearing in spite of the fact that they want a larger family with more children, for the fulfillment they would get from the value of rearing a child (Friedman et al, 1994). Whereas, in the West Germany, the primary reason for its persistent fertility decline can be argued as the incompatibility of women's employment and family life as a result of inefficient family policies, together with insufficient public child care facilities, and furthermore, West German women tend to go polarizing as either work-oriented or family-dedicated, which causes unfavorable behaviors in both fertility rate and female labor force participation.

- Different measures for the West Germany and the East Germany

From what mentioned above, it is palpable that when it comes to measures for fostering the fertility and female employment behaviors in Germany, different measures should be formulated based on distinct features in West Germany and East Germany.

First of all, for the eastern part, due to the economic problems, unemployment maintains fairly high after the unification. From figure 5, it can be observed that unemployment in the former GDR maintains almost double what it is in the western Germany, however, the female participation in labor market in the former GDR has been observed relatively higher than what it has been in the West Germany due to East German women's traditional attitude towards employment participation (Bonin and Euwals, 2002, M). As though the female/mother's labor force participation in the old GDR has been higher than its western counterpart, the difference seems to decrease, because female employment rate in the east is slightly approaching a negative trend due to slow economic development and disincentives produced by current family and labor policies (Hanel and Riphahn, 2010). Though the adoption of the west pattern caused great loss of the old incentive policies, in East Germany, they still possesses large legacy of child care facilities from the old GDR period (Hara, 2003, Kreyenfeld, 2004). The incompatibility of employment and motherhood is not quite the reason for the low

fertility behavior (Bonin and Euwals, 2002), rather, vastly changing economic conditions after the demise of communist reign have been also considered as the major reason that make it difficult for women to achieve the number of births they would like (Dorbritz, 2008). Therefore, it is important to keep the women employment in the East stable and at the same time to support and encourage women to have more children. The crux is boosting economic performance in the East so that to moderate people's misgiving about the future.

(Figure 5 about here)

With regard to West Germany, the most important of all is facilitating women to get equilibrium between employment and motherhood so that to enhance their preference for having child as well as taking part in labor market. As particularly examined in previous sections, high-quality subsidized child care facilities is seen in this thesis as a key way to facilitate women reconcile family life and employment. Furthermore, from aforementioned short period of fertility rate rise and favorable female participation in labor force in former GDR from 1976 until shortly prior to the unification, it seems incontrovertible that the old incentive system implemented in East Germany was fairly effectual in terms of boosting birth rate and women employment, in spite of that this incentives was also considered as a mean to infuse the ideology of socialist society by degrees (Conrad, Lechner and Werner, 1996). The main function of the incentive policies in old GDR was to provide parents (especially mothers) with opportunities to counterbalance their employment and parenthood (motherhood in particular), by supplying befitting and sufficient birth assistant, maternal leave with decent income replacement and child care facilities, together with guarantee for mothers to return to their former jobs after birth giving. Availing themselves of the favorable policies, East German women were able to reconcile their employment and family work, which contributed to the short raise of birth rate and women's general attitude towards participation in employment. In view of that, one can tentatively put into consideration that if it is necessary to adopt, if not all, part of the old GDR incentive measures, corresponding to the actual situation of the western Germany. Although seen from today, compared to East Germany, West Germany leads a relatively higher standard of living. If viewed in a long run, it is rather hard to maintain a stable living, given that the society starts to lack necessary complement from young generation in the labor force while the number of elderly people is increasing steadily. Hence beyond

everything, the most substantial problem placing in front the German government is the ageing population. Apt and timely maneuvers should be enacted and put into effect.

## **5. Conclusion**

In the beginning, this thesis rings an alarming bell on worldwide population ageing by presenting the unfavorable statistics and projections of the population trend. The population in most of the European countries is particularly ageing at a disconcerting rate. Population ageing signifies a severe problem that the population of working age will be not able to offset the population of elderly people in foreseeable future, if the current fertility trend is still persisting. This problem will cause grave social and economic crisis. Hence, increasing fertility rate and female participation in labor market are two imperative aspects argued at present for remedying the population and labor force behaviors. Women are inevitably the main people to take these two burdens.

This thesis adopts the affordability hypothesis presented by Fahey and Speder (2004), which argues having a child or larger size of family is actually still desirable however not quite preferable due to the limited affordability produced by economic pressure. Fahey and Speder's affordability hypothesis is examined to be partly true in this thesis. German women are in fact desire to have children and larger family in a relatively earlier age, economic pressure is a reason but not the major part that impeding them to choose having the certain amount of children at the age they desire. The main cause of their less preference to have a child is the high opportunity cost of having a child, to be specific, the incompatibility of employment and motherhood. Based on Hakim's (2006) classification of women, German women are observed more likely to go two polarizing groups --- work-oriented and family-dedicated, which lead to both low fertility rate and female labor force participation. Therefore Germany, as a typical highly developed country with declining fertility and low female labor force participation, is chosen as the study in this thesis. The reason that German women cannot well combine both work and family life is the incompatibility between two domains.

What is distinctive about this thesis is that fertility decline and low female participation in labor market are put together into discussion. Raising fertility rate and female employment are two indispensable means to tackle population ageing problem, meanwhile, they are double burden for women in Germany where childcare facilities



are remarkably low associated with “male breadwinner” idea reflected in family policies. Many previous literatures have studied either mainly on one of the two issues -- low fertility rate and unfavorable female participation in employment, or focuses on the hypothesis that increasing female labor force participation causes fertility decline. However, these two issues should be analyzed together due to their inherent connections, especially for policy-makers to make practical and effectual maneuvers for moderating the ageing population. Therefore, this thesis collects and analyzes previous studies on these two issues and produces its own humble contribution in regard with tackling current population problem.

In section 3, it is found that the social constrains mainly come from the traditional idea of “male breadwinner” ingrained in German society along with its strong reflection in family policies. These constrains lead to high incompatibility of family life and employment for women, therefore women’s preferences for education, age of childbearing and other options in life are fairly affected. Dearth of child care facilities in Germany is examined as the major reason for women’s incapability of combining work and family life. This thesis suggests that subsidized high-quality child care facilities should be widely established along with proper alteration of family policies. More high-quality full-time day care is the major solution proposed in this thesis based on the combination of opportunities and preference. High-quality day care can satisfy parents’, particularly mothers’ wish of decent early education for children. Full-time day care will great diminish the incompatibility of domestic work and labor work for women, so that more female labor participation can be ensured. In an economic point of view, more day care or similar institution can offer more job opportunities even for high educated students. It can be very important as well as effectual to amalgamate fertility rate reaching replacement with sufficient female participation in the labor market, in particular women with high education and capability.

From the analyzing of the variations between East Germany and West Germany in terms of their fertility and female labor force participation behaviors, this thesis found that different measures should be taken when deal with fertility and employment problems in two parts. In West Germany, increasing subsidized high-quality child care facilities and apt alteration of family policy are advisable while in East Germany, due to its legacy of child care facilities and women’s traditional orientation to full-time employment, the crux is to boost economic performance.

The current demographic problem can be seen as a cumulative result from decades of carelessness from the government; in return, it will cost even longer time to achieve an upturn of current complexion. The protracted fertility decline is not a minor problem that can snap back after remedy, it will take progressive and great effort and attention to moderate and then boost its behavior. Immediate policy responses to this disconcerting problem are urgently in need. However, before any measure to be taken, it is essential and rather rational to fathom the problem thoroughly by looking at the connections between the opportunities and the preferences which together have great impact on demographic behavior of a society. Understanding the connections and pinpointing the interaction will facilitate policy-makers to grasp the exact points where they can put efforts on for drawing up effectual maneuvers to moderate the fertility decline. Not only neglect and underestimation of this problem may deteriorate the depopulation, but inefficient and ineffective political measures as well will necessitate further this decline.

Kramer (2012) emphasizes that:

(...)demographics are not self-regulating, and successful population policies require governments to make long-term investments in encouraging childbirth. This means a great deal of financial support, even in times of austerity; when it comes to population policies, there is no such thing as short term success.

A robust and stable population is of great significance in Europe, especially with the integration of EU ongoing in order to compete with other superpowers and stabilize its position in the world. "Europe's weak reproductive performance is a concern not only because of its internal implications but also because of likely effects on Europe's global position" (Fahey and Speder, 2004). Therefore, further study should be focus on whether it is necessary and possible to formulate a family policy in European Union in the aggregate. By far, there is not yet a formal policy on fertility at European Union level. "The EU has no competence in either population policy or family policy" (Fahey and Speder, 2004). According to present situation, too many differences among European Union member states in terms of many aspects such as different cultural influences, economic problems, and welfare systems variations and so on and so forth, the prospect of an EU family policy is, if not utterly impossible, rather difficult and complex to device. However, this doesn't mean to drop this propose. Proper and right amount of effort still could and should be taken in that regard. Firstly of all, with a better and thorough understanding of what people need and demand, design and

implementation of appropriate incentive measure which meet people's need is fairly feasible and crucial to the future development of European Union.

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## 7. Figures and tables:

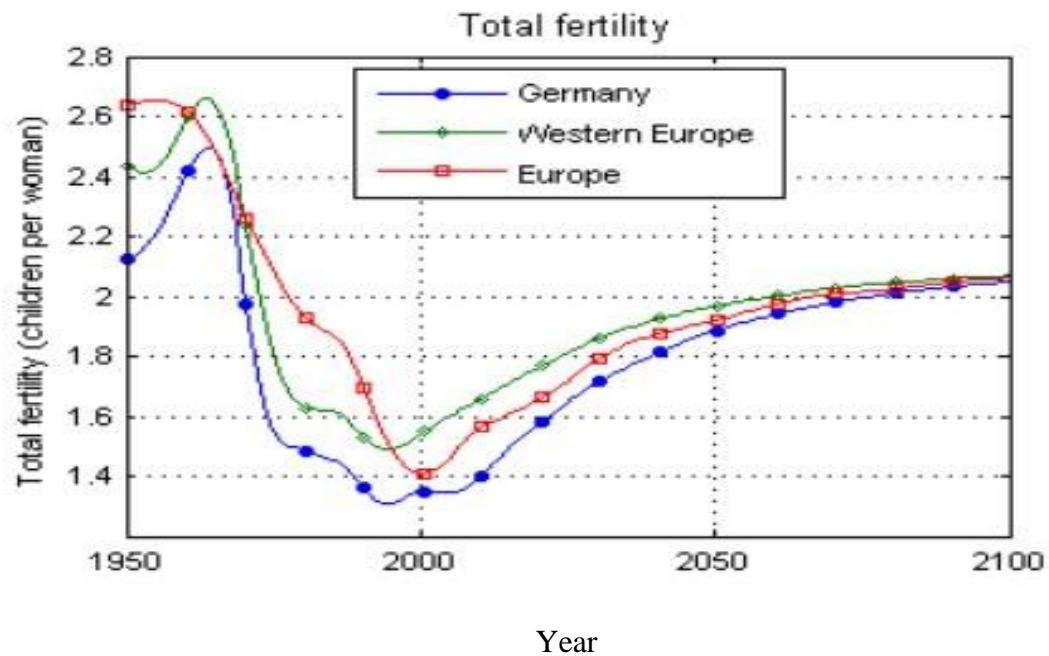
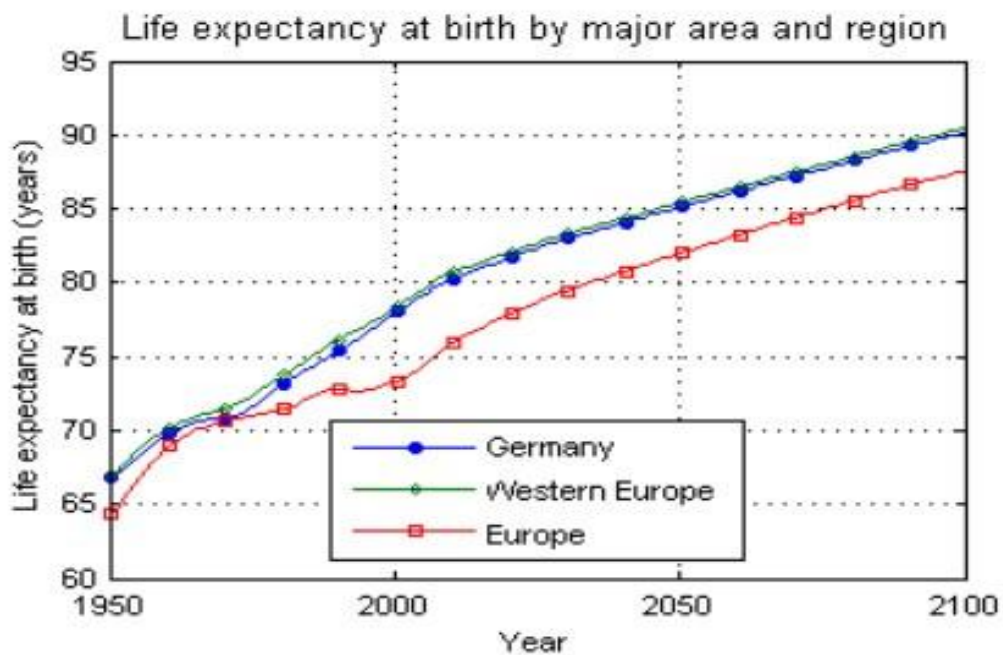


Figure 1. Total fertility of Germany, Western Europe and Europe as a whole from 1950 to 2100. Source is from United Nations, Department of Economic and Social Affairs, Population Division, Population Estimates and Projection Section.<sup>20</sup>



<sup>20</sup> More information please refer to: [http://esa.un.org/unpd/wpp/country-profiles/country-profiles\\_1.htm](http://esa.un.org/unpd/wpp/country-profiles/country-profiles_1.htm)

Figure 2. Life expectancy at birth of Germany, Western Europe and Europe as a whole from 1950 to 2100. Source is from United Nations, Department of Economic and Social Affairs. Population Division, Population Estimates and Projection Section.<sup>21</sup>

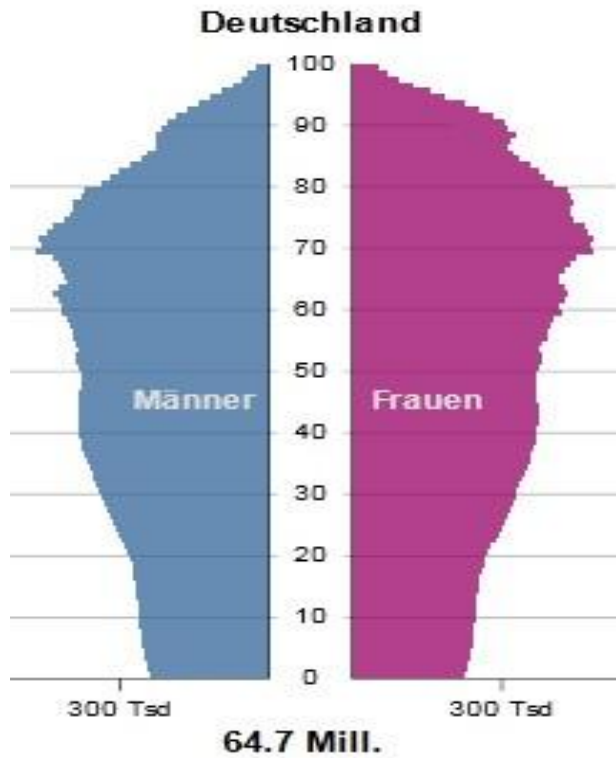


Figure 3. The age pyramid of Germany as a whole in 2060. Source from the 12<sup>th</sup> Population Projection provided by Federal Statistic Office (Destatis). For more information please refer to: <https://www.destatis.de/laenderpyramiden/>

<sup>21</sup> More information please refer to: [http://esa.un.org/unpd/wpp/country-profiles/country-profiles\\_1.htm](http://esa.un.org/unpd/wpp/country-profiles/country-profiles_1.htm)

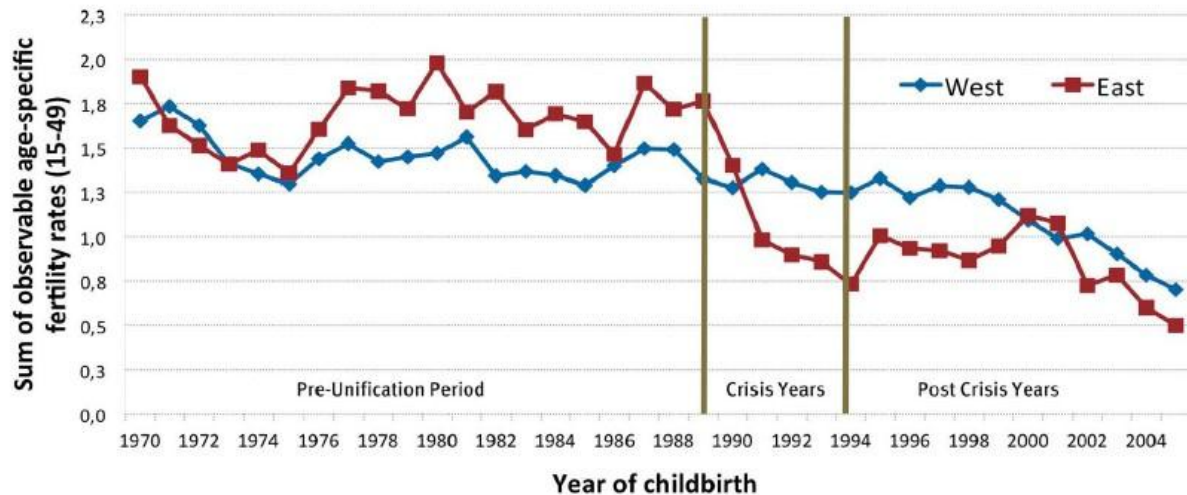


Figure 4. Fertility rates changes in the West Germany and former GDR from 1970 to 2004. Source from: Strengthening Efficiency and Competitiveness in the European Knowledge Economies (SEEK), Conference 2012: The Green Growth Challenge; Administrative data from the German Federal Pension Fund that contains employment and fertility histories of West and East German women prior to and after the German Unity.<sup>22</sup>

	Total fertility rate (live births per woman)		Life expectancy at birth (years)	
	1990	2008	1990	2008
<b>EU-27</b>	:	1,60	:	79,4
Argentina	2,90	2,25	72,1	75,3
Australia	1,86	1,93	77,5	81,4
Brazil	2,60	1,90	67,3	72,2
Canada	1,69	1,65	77,8	80,5
China	2,01	1,64	69,9	72,7
India	3,72	2,73	59,0	64,2
Indonesia	2,90	2,19	63,1	67,9
Japan	1,48	1,32	79,5	82,7
South Korea	1,70	1,29	72,9	80,0
Mexico	3,19	2,41	71,8	76,2
Russia	1,55	1,44	66,6	67,7
Saudi Arabia	5,45	3,03	69,6	73,1
South Africa	3,34	2,55	61,2	51,2
Turkey	2,90	2,15	64,4	73,0
United States	1,99	2,07	75,6	78,0
<b>World</b>	3,04	2,52	64,4	67,9

Table 1: Fertility and mortality, 1990 and 2008. World and non-EU-member countries, averages for 1990-1995 and 2005-2010. Source: Eurostat online data codes, and United

<sup>22</sup> More information please refer to: [http://seek.zew.eu/fileadmin/user\\_upload/Redaktion/SEEK/Projektpräsentationen\\_2011/Project4\\_Presentation2011.pdf](http://seek.zew.eu/fileadmin/user_upload/Redaktion/SEEK/Projektpräsentationen_2011/Project4_Presentation2011.pdf)

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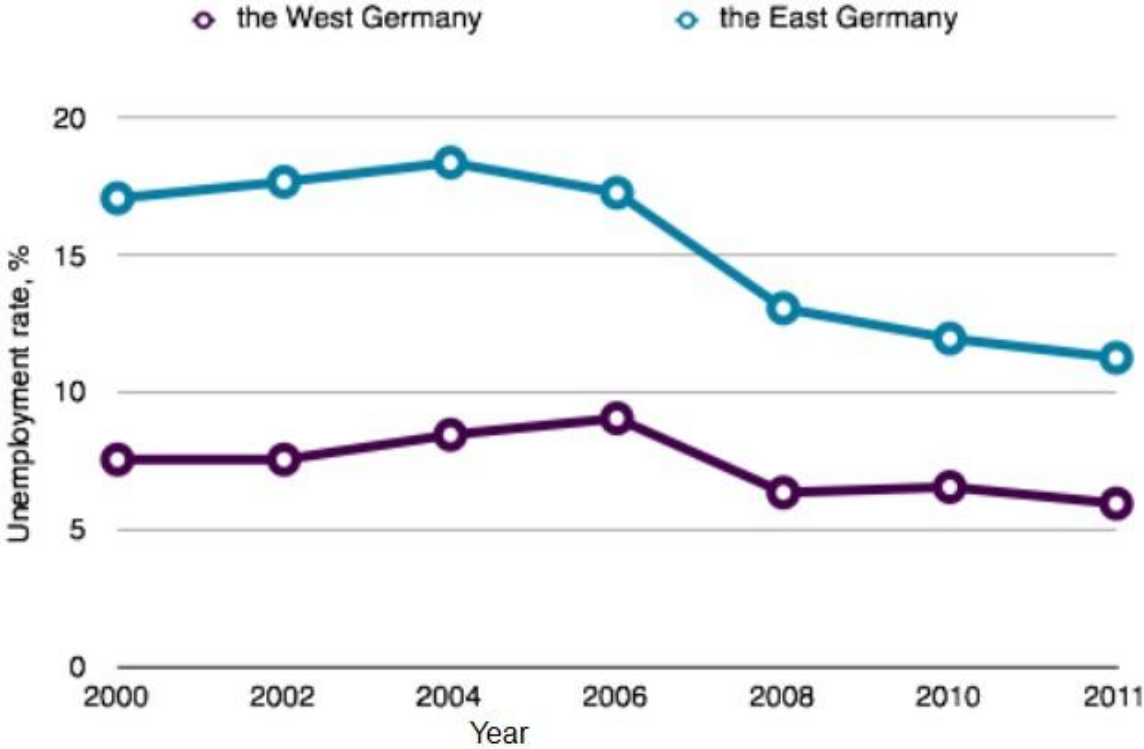


Figure 5: Unemployment rate in West and East Germany, %; Source from Federal Statistical Office (Distatis)



## **8.Acknowledgement**

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