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The German Precariat and the Role of Fundamental Security

Is the Unconditional Basic Income a Possible Solution for the Growing Precarity in Germany?

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Abstract

The international business competition fostered new forms of flexible working and atypical employment. The flexibilization process started during the 1970s and continues to change the labor market and the perception of labor to the present day. As a result, a new class, called the precariat, is establishing which can be characterized by insecure employment and living. Precarity resulting from fixed-term, short-term, part-time or temporary employment can concern everyone and has negative consequences on society, economy and health. In parallel to the development of precarity, a possibility of basic security in the form of the Unconditional Basic Income (UBI) is discussed globally. However, the particular situation in Germany, regarding the precariat and the UBI as a possible solution has not been outlined yet. Although, UBI implementation models have been proposed for Germany, there is no analysis in the current literature that would show the effect of the UBI on the German precariat. Applying a modern macroeconomic analysis within the scope of the jobless growth argument, the paper investigates the effect of an UBI on goods demand, economic growth, employment level and consequently, the precariat. The paper shows that an implemented UBI as well as labor-related security increase economic growth and can reduce the German precariat. Politicians and employers should be aware of this positive aspect of the UBI and implement policies to reduce labor-related insecurities in order to decrease the growing precarity.

Keywords: Precariat, atypical employment, flexibility, basic income, jobless growth, AS, AD

JEL-Codes: E21, E24, E27, H53, I13, J68

1. Introduction

“One theme was that countries should increase labor market flexibility, which came to mean an agenda for transferring risks and insecurity onto workers and their families. The result has been the creation of a global ‘precariat’, consisting of many millions around the world without an anchor of stability. They are becoming a new dangerous class” (Standing, 2014, p.1).

Precarious working and living exists in every country, regardless of whether this particular nation is rich or poor. The situation includes Nepalese workers whose houses were destroyed by an earthquake and who go to Qatar to build new soccer stadiums for the FIFA World Cup to earn money for the family. The workers often receive less income than they were promised and some die due to bad working conditions (ARD Mediathek, 2016). Many Chinese workers experience a similar situation, being brought into industrial working camps far from home, where many commit suicide (Standing, 2014, p.48). In developed countries, the academic precariat consists of unemployed graduates and researchers doing project based work with fixed-term contracts in universities (Dörre, 2009, p.50). Geographical precarity is another phenomenon that often results from insecure employment. It describes precarious living, such as the suburbs in Paris (Castel, 2009, p.32). The actual quantity of the precariat cannot be determined precisely as there are no specific statistics. Moreover, there are certain groups in the precariat, which cannot be assessed due to unknown dark figures (Standing, 2014, p.108). It is only possible to estimate the number of people who seem to have insecure employment or who are denied the rights regular citizens usually have (ibid. p.24). The resulting number is approximately one quarter of the overall adult population that could be described as members of the precariat (ibid. p.41).¹

Precarious situations include facing the risk of poverty and social exclusion² (Schmid and Protsch, 2009, p.29). Poor individuals often cannot have a well-structured life plan due to the lack of saving possibilities. As the statistics presented in 2011 by the European Commission show, approximately one out of four of the EU citizens is at risk of poverty or can become socially excluded (European Commission, n.d.). Having a job neither prevents from social exclusion nor from poverty. About one-tenth of the employed EU population faces this risk (ibid.) due to the fact that the number of atypical employments increased in all European countries (Schmid and Protsch, 2009, p.24). Regarding Germany, its labor market has changed

¹ The authors express their thanks for helpful comments from Sarah Kröger.

² This is measured by the AROPE (a risk of poverty or social exclusion) indicator. It describes a “...situation of people either at risk of poverty, or severely materially deprived or living in a household with a very low work intensity” (Eurostat, 2014).

since 1985 (ibid. p.3) with atypical employment in every sector (ibid. p.16). Although the unemployment rate decreased from 11.7 percent in 2005 to 6.1 percent in 2016 (Bundesagentur für Arbeit, 2017, Table 2.1.1), the percentage of the German population at risk of poverty increased from 15.2 percent in 2008 (Statistisches Bundesamt, 2011, p.25) to 16.7 percent in 2015 (Statistisches Bundesamt, 2017, p.23). About one third of single households has a precarious material status, while women have a higher risk than men regarding financial insecurity (ibid.). Furthermore, one out of five Germans is concerned by the risk of social exclusion and people in the employable age are at the highest risk of 21.3 percent (ibid.). Along the lines of argumentation presented here, a new study by Brady and Biegert (2017) also documents a rise in precarious employment in Germany. Their analysis of the disappearing “German miracle” (Burda 2016) reveals that models including a wide variety of independent variables – demographic, education/skill, job/work characteristics, and region – cannot explain the rise in precarious employment. Instead they argue that institutional changes to be the most plausible fundamental reason.

Precarious employment brings new social risks and it is crucial to find ways of reducing them by a new form of social protection (Schmid and Protsch, 2009, p.14). The Unconditional Basic Income (UBI) is regarded as a possibility to reduce poverty, improve health as well as social and political involvement (Basic Income Earth Network (BIEN), n.d.a). Global discussions about implementations of an UBI also influence the debates in Germany, such as implementation models proposed by Poreski and Emmler (2006), Die Linke, Bundesarbeitsgemeinschaft Grundeinkommen (2006), Werner (2007), Althaus (2007) as well as Hohenleitner and Straubhaar (2008).³

2. What is the precariat?

2.1 Defining precarity

The precariat is a *class-in-the-making* rather than a *class-for-itself* (Standing, 2014, p.11). Two familiar terms form the word *precariat*, namely the adjective *precarious* and the noun *proletariat*, making the precariat a neologism (ibid.). However, unlike the proletariat, the precariat does not have a prospect of a long and stable employment supported by collective bargaining (ibid. p.10), as well as no particular identity resting upon a specific occupational community (ibid. p.16). According to the Macmillan Dictionary (2011), the precariat describes “a social group consisting of people whose lives are difficult because they have little or no job

³ A brief literature review can be found in Gilroy, Heimann and Schopf (2013).

security and few employment rights”. Standing (ibid. pp.16-17) emphasizes that the precariat does not have the seven aspects of labor security which are defined in Table 1 below:

Table 1: Forms of labor-related security

| Labor-related security | Definition |
|-------------------------------|---|
| Labor market security | Adequate income-earning opportunities; at the macro-level, this is epitomized by a government commitment to “full employment” |
| Employment security | Protection against arbitrary dismissal, regulations on hiring and firing, imposition of costs on employers for failing to adhere to rules and so on |
| Job security | Ability and opportunity to retain a niche in employment, plus barriers to skill dilution, and opportunities for “upward” mobility in terms of status and income |
| Work security | Protection against accidents and illness at work, through, for example, safety and health regulations, limits on working time, unsociable hours, night work for women, as well as compensation for mishaps |
| Skill reproduction security | Opportunity to gain skills, through apprenticeships, employment training and so on, as well as opportunity to make use of competencies |
| Income security | Assurance of an adequate stable income, protected through, for example, minimum wage machinery, wage indexation, comprehensive social security, progressive taxation to reduce inequality and to supplement low incomes |
| Representation security | Possessing a collective voice in the labor market, through, for example, independent trade unions, with a right to strike |

Source: Standing, 2014, p.17

As far as income security is concerned, Standing (ibid. pp.18-20) states that the concept of *social income* further explains the situation of the precariat. The idea of social income is built on the assumption that there are generally six different sources of income, which are self-production, money income, mutual support claims by family or community, company benefits, state benefits and private benefits resulting from saving and investment. The precariat has a particular social income pattern. People in the precariat cannot rely on family or community support, on state or firm benefits and cannot earn additional money income due to the lack of private benefits (ibid.). Furthermore, people in the precariat can be described as *denizens* or individuals who are not granted the same rights as people enjoying full citizenship. These can be civil, cultural, social, economic and political rights (ibid. pp.22-23).⁴

Bourdieu (2004, p.107) states that “precarity is everywhere” and that it has only one main effect: de-structuring of the human subsistence and a lost connection to space and time. In order

⁴ For an example of the “Business Ethics: Profits, Utilities, and Moral Rights” see e.g. Goldman (1980).

to be able to act in a reasonable way in the present, people need to hope for a better future which is not the case with the precariat. Standing (2014, p.20) calls it *no shadow of the future*, leading to opportunistic patterns of behavior. Precarity reminds workers of their substitutability, whereas employment is only a fragile privilege (Bourdieu, 2004, pp.107-108). However, although many perceive atypical employment as negative, it is possible that it represents a new form of standard employment which could be a win-win-situation for workers and employers in the global labor market (Schmid and Protsch, 2009, p.1). Precarious employment enables a high employment level, especially as far as women are concerned (ibid. p.14). Precarious employment can further be regarded as liberation from traditional professional relationships (Castel, 2009, p.26). Especially highly qualified individuals often distance themselves from the negative image of the precariat and identify themselves as free *self-managers* (Dörre, 2009, pp.47-49).

Time and its perception has mainly changed since the beginning of the industrialization and this change is an important part of the precariatization (Standing, 2014, p.197). Before the industrialization, working time was associated with seasons and weather conditions rather than with regulated labor hours (ibid.). Also, modern lives do not comprise time blocs anymore. People do not have a structured education, labor and retirement period and the lines between workplace and home are blurring (ibid. pp.199-200). A crucial aspect of flexibility is time that is needed to do work-for-labor, meaning that there are many activities, such as searching for job offers, buying clothing for interviews, improving the CV, acquiring additional skills etc. that should be done in order to perform well in labor (ibid, pp.206-209). A rather long-term cost of such time squeeze is the reduction of time devoted to raising children and transferring ethical behavior (ibid. p.215). This may enlarge the future precariat.

2.2 Who is in the precariat?

According to Standing (2014, p.101), everybody can be in the precariat due to some unforeseen circumstances. However, there are particular groups that generally have a high likelihood to be precariatized. According to Standing (ibid. p.112), the youth is the most prevailing group in the precariat due to frequent labor exploitation. Examples are the use of internships to employ cheap or costless workforce as well as long probationary time periods during which young employees receive less salary and less firm benefits. Simultaneously, there is a general feeling among young people that they should do as many internships as they can (ibid. pp.128-129). In particular, the young male population experiences difficulties finding an identity with which

they would have self-respect. This is mainly because there are no traditional role models among the male relatives who would show by example how to achieve stability in employment, a well-planned life and how to be able to provide for the family. Consequently, the male youth extends its adolescence period (ibid., p.109), a phenomenon that is present in many industrialized countries where “the image is of the ‘boomerang son’, returning home after education and drifting into lethargy, part-time jobs, debt, drugs and vague ambitions ‘to travel’” (ibid., p.110). Moreover, a study of the Friedrich Ebert Stiftung (2006) estimated that some eight percent of the German population now belongs to the *abgehängtes Prekariat* (detached precariat) and is largely composed of eastern German male low-wage workers with a tendency to sympathize either with the political left wing party (Die Linke) or the extreme right wing political parties (AfD).

Another important population group which is particularly represented in the precariat is the population of women. Currently, there is a phenomenon of double *feminization of labor* which means that the number of women in the labor market increases, while simultaneously, the labor market becomes flexible which seems to be especially an advantage for women (Standing, 2014, p.102). Precarious employment particularly fosters the *triple burden*, meaning that beside the job which is the money income source, women work at home raising children and often care for elderly family members (ibid. p.105). Older people also form a very important part of the precariat, mainly due to demographic changes (ibid. p.135). While in the 1980s, elderly people had to retire untimely, the retirement age is now constantly extended due to the lack of young professionals (ibid.). Another reason why the precariat comprises a group of elderly people is the decrease in state pensions in most industrialized countries (ibid. p.136).

As migrants are an important group in the precariat, it is crucial to understand their situation (Standing, 2014, p.153). Undocumented migrants can be employed in bad working conditions and for very low wages as they can be controlled by the fear of being deported (ibid.). As there is a high risk of a thriving shadow economy, Standing (ibid.) calls undocumented migrants the *shadow reserve army*. Migrants also have problems finding appropriate jobs because their qualifications and diplomas are often not recognized in the destination country (ibid. p.162).

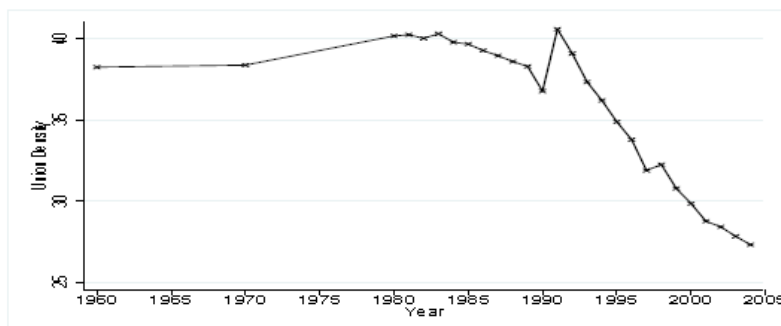
In addition to the groups mentioned above, part of the global precariat are ethnic minorities, such as the American black population, disabled and *episodically disabled* people, like those who sometimes experience burnouts or depression, and criminalized people who face

difficulties to find regular employment after being released from prison and who are often used as cheap labor for production during the incarceration (Standing, 2014, pp.147-151).

2.3 Reasons and consequences of precarity

The consequences of the neo-liberal politics in the 1980s are diverse measures of flexibility, including wage, employment, job and skill flexibility. The objective has been to attract investment and thus to ensure economic growth (Standing, 2014, pp.8-11). An important event associated with the precariat is the *global transformation* (ibid. pp.45-52). It particularly implies the increase in trade between nations and the relatively new importance of the emerging market economies (ibid. p.46). Especially, the entering into the world trade market by China and India has caused a high increase in global labor supply and a decrease in wages. Labor market participants in industrialized countries have found themselves in worse bargaining positions than before (ibid. pp.46-47). This has been followed up by the fact that union membership has hit an all-time low in Germany since 2016 (see Figure 1 below).

Figure 1: Evolution of Gross Union Density



Gross union density in percent; 1960–1990: West Germany; 1991–2004: Unified Germany.

Union membership in CGB (*Christlicher Gewerkschaftsbund*, data until 1999; German Statistical Office (*Statistisches Bundesamt, Statistische Jahrbücher*), union information thenceforward), DAG (*Deutsche Angestellengewerkschaft*, until 2000; data: German Statistical Office), DGB (*Deutscher Gewerkschaftsbund*, data: www.dgb.de), DBB (*Deutscher Beamtenbund*, data: www.dgb.de), and DPoIG (*Deutsche Polizeigewerkschaft*, until 1970, data: German Statistical Office).

Employment (*abhängig Beschäftigte ohne mithelfende Familienangehörige*) from German Microcensus: www.destatis.de.

Source: Statistisches Bundesamt, n.d.

Part-time employment also contributes to the growth of the precariat because it is often open to exploitation (Standing, 2014, p.60). Employees in part-time are often required to complete more work hours than they are officially paid for (ibid.). Additionally, the worldwide growth in labor agencies, acting as intermediaries, promote non-standard employment (ibid. p.56). Outsourcing

and offshoring allow shifting employees who consequently, cannot control their career path (ibid. pp.62-63). Moreover, in times of de-industrialization and tertiarization of economies, collective and union bargaining has strongly declined which has fostered individual precarious contracts (ibid.). Another important event that increased the amount of people in the precariat is the economic crisis. Especially, the financial crisis of 2008/2009 led to labor cost reductions, so that many found themselves in precarious employment or even unemployment (Standing, 2014, pp.83-86).

Education plays a crucial role in the precariat and the current *commodification of education*, is the main reason for the high number of young people in the precariat (Standing, 2014, p.115). The main goal of the current education system is not to transfer valuable knowledge by inter-generational communication, but rather to create employable human capital (ibid. p.115-118). University education does not guarantee an appropriate position in the labor market as the majority of new jobs that are created are not meant to be for university graduates (ibid. pp.115-116). Hence, many young graduates have to accept positions that require low levels of qualification and consequently, suffer from frustration. Traditionally, education has been the core element of mental development and liberation (ibid.). In a globalized society, education represents a competitive industry which can be observed by diverse rankings of universities worldwide. Thus, instead of promoting universities on the basis of teaching quality, many emphasize the importance of modern facilities instead (ibid. p.117).

Generally, people who find themselves in precarious employment situations tend to prolong their bachelorship as well as start a family later than an individual with a stable position (Standing, 2014, p.110). While the number of marriages decreases in industrialized countries, cohabitation becomes the new family form (ibid. p.111). Furthermore, there is a trend towards more single households (ibid.). This fact has many economic consequences. Especially, regarding the expenditures of a household. A family with children demands more products in a larger quantity and invests in property and vehicles. This leads to a higher GDP and to economic growth of a nation. As opposed to this, single households would not invest or buy in large quantities, which can decelerate a country's production and growth. In the past 20 years in Germany, the number of single- and single parent households has risen rapidly. Between 1991 and 2011 the share of single households increased from 33.6 percent to 40.4 percent. During the same time period, the number of households in Germany with at least three members decreased from 35.6 percent to 25.4 percent (Grabka and Frick, 2008; Statistisches Bundesamt, 2013). Many household and homemaking budget costs develop under proportionally respective

household size, meaning that their equivalent available income is smaller due to smaller household size.

Precarious living results in the lack of trust in labor and limited community support (Standing, 2014, p.14/33). Members of the precariat thus feel anger, anxiety, anomie and alienation (ibid. p.33). People become angry due to the status frustration, the lost ability of social upward mobility and the permanent comparison with regular workers (ibid. pp.33-34). On a societal level, precariatization can cause an involuntary change in roles within a family (ibid. pp.106-107). While more women become the main earners in the family, men have lost a large share of employment partly due to the recession and partly due to the above mentioned feminization of labor.

As there are situations where parents and children have a precarious living, they cannot afford to support each other financially. This leads to a loss of the inter-generational solidarity and coherence which is an important component within a family (ibid. p.37/112). As a result, people have to rely on costly loans that often increase their debts and make the living circumstances even more precarious (ibid. pp.82-83). Moreover, as those in the precariat do not have a stable employment with constant training possibilities, they cannot develop a professionalism that would ensure a certain status and good career prospects (ibid. p.39). This might lead to disengaged, unmotivated employment relationships and ultimately to bad results at work (ibid. p.40).

3. What is Unconditional Basic Income (UBI)?

3.1 Definition

UBI is related to many names, such as *citizen's wage*, *territorial dividend*, *state bonus*, *demogrant* etc. (van Parijs, 2004, p.7). Standing (2014, p.295) describes the idea of UBI in the following manner: "The core of the proposal is that every legal resident of a country or community, children as well as adults, should be provided with a modest monthly payment". The international network, Basic Income Earth Network (BIEN), states that the UBI is "...a periodic cash payment unconditionally delivered to all on an individual basis, without means-test or work requirement" (BIEN, n.d.a). Standing (2014, p.296) further claims that additional money should be paid to recipients with special needs, such as disabled individuals. Furthermore, it should be the choice of each individual what to spend the UBI on. Thus, vouchers on specific products or services should not be part of the UBI because such practice would not foster free choice but rather support *unfreedom* (ibid. pp.296-297).

The general idea of a basic income is not new as already in the 16th century the minimum income was promoted to help the poor population and to ensure dignity (BIEN, n.d.b). For example, *Utopia*, written by Thomas More and first published in 1516, contains an argument in favor of minimal income because it would help to reduce theft. Sentencing thieves to death is described as inefficient due to bad living situations, particularly as far as food is concerned. Thus, providing the poor with a minimal income would resolve this dilemma and prevent them from becoming thieves (More, 1963, pp.43-44). In the end of the 18th century, the discussion about UBI emerged again in the form of the idea of basic endowment (BIEN, n.d.b). Paine (1999) states that in a natural state, land is regarded as common property so that every individual, regardless of the family's status, has some property after being born. In a civilized society, such entitlement is invalid, as there are inhabitants who can cultivate a piece of land and retain it as property over several generations. Therefore, in civilization, every affluent person who has land property should pay a *property rent tax* to the society, so that even the poorest individuals have some asset they can rely on and are not forced to live a life that is worse than it would be in a primitive society. Paine (1999, pp.7-10) emphasizes that the payment should not be regarded as charity but as a universal right to compensation.

3.2 Pros and Cons of an UBI

The approach of social security in the form of an UBI is criticized regarding various aspects. Hauser (2007, pp.68-70) identifies six main issues that will affect a nation after the introduction of an UBI. Firstly, the current social security system has to be abolished, implying a cancelling of important social transfer payments. Secondly, he estimates there may still be a deficit of approximately 287 billion euro for the studied time period, as a rough example for Germany. As a third problem the author mentions the end of the force to participate in the labor market as the subsistence minimum is provided by the UBI. There are particular groups that probably will reduce their labor supply or completely exit from the labor market. In particular, this would concern women with children, elderly people, graduates and the long-term unemployed population. The fourth problem concerns a high probability of a massive immigration in the country that implements an UBI, especially when there are regulations regarding a free movement of people like in the EU. Consequently, this would lead to a more serious financial burden. An inefficient redistribution is the fifth problem. People participating in the labor market and earning labor income would have to finance the rest of the population through high taxes, an opinion that van Donselaar (2009) agrees with. As a result, employees would increasingly search for possibilities to hide income, such as choosing illegal informal labor market practices. Lastly, there is no ultimate efficiency of the UBI approach as citizens would

have to finance the majority of the UBI transfer payment by themselves (Hauser, 2007, p.70).⁵

Wiesenthal (2007, pp.79-82) states that the idea of an UBI is a *real utopia*. According to him, there is a fundamentally different problem, particularly in Germany, namely a lack of motivation and a relatively bad educational system. Especially the young population should not experience an opportunity of pausing but have incentives instead. They should learn how to handle flexible job situations. An UBI would aggravate the issue of willingness and lead to social exclusion. Furthermore, even if the UBI is financed through the goods tax instead of the income tax, it has a negative, inflationary effect. Low-wage workers would be the ones whose situation will be worsened by high prices on goods (ibid.).

There are many positive aspects of the UBI which are presented by the proponents (Netzwerk Grundeinkommen, n.d.a). For example, employers could benefit from the UBI because their employees would receive additional support by the state and this might not only increase happiness and productivity in the company but also relieve the employer in his role. With the implementation of the UBI, employees become more independent from gainful employment and have the possibility to perform other activities outside the economic market, for instance volunteer or do work within the family. Simultaneously, an UBI ensures a basic security which prevents all individuals from working poverty. Job seekers can benefit from a calm search for employment without having the pressure of taking jobs that do not correspond with their education or professional skills. This advantage can therefore be interpreted as the possibility of denying an unattractive job offer (ibid.). As opposed to the majority of current social security systems, the introduction of an UBI creates a situation where citizens live on a subsistence level only if they decide not to work (Hauser, 2007, p.67). Otherwise, a much higher standard of living can be achieved. Additionally, the UBI has an overall positive impact on the society because it diminishes discrimination and class division among citizens. Thus, there is a possibility that stigmatization is reduced (Netzwerk Grundeinkommen, n.d.a). Finally, regarding the effect on the state, a universal UBI facilitates the administration process of transfer payments (Hohenleitner and Straubhaar, 2008, p.23) and does so before any social issues arise (van Parijs, 2004, p.15). It is an approach that in many proposals requires only a proof of existence, which can be submitted in the form of a birth certificate (Hauser, 2007,

⁵ According to Ehrenberg (1994, pp.6-13), cross-border economic integration and national political sovereignty have come into conflict and as it can be simply analyzed in a supply and demand curve diagram it is almost always the case that the burdens of social policies are carried on the shoulders of labor.

p.66). Therefore, the state can become more efficient.

Although there is negative critique regarding the effect of the UBI on labor supply and employment, some authors present evidence that after the implementation of the UBI the labor participation rate can even increase. Gilroy, Heimann and Schopf (2013, p.43) examine the current German social security system and labor situation in a neoclassical labor supply model. They find out that although there is no intrinsic motivation in a neoclassic model, the UBI approach increases employment. One of the major advantages of the UBI, particularly regarding Germany, is that it simultaneously represents a possibility to eliminate the *unemployment trap*⁶ (ibid. 2013, p.58). Therefore, as recipients are punished with a lower transfer payment and the cumulative income does not increase, labor activity becomes less profitable (Schramm, 2008, p.182). Moreover, Gilroy et al. (2013, p.49-50) state that the introduction of a basic income would increase the progressivity of the average financial burden relatively to the gross wage and therefore, the UBI would support fair redistribution. Other authors have similar results. Although the analysis done by Petersen (2011, pp.929-930) shows that an UBI leads to a reduction of labor supply and in some cases, to a withdrawal from the labor market, the analysis is based on the behavior of a rational agent, a Homo Oeconomicus, who maximizes utility and is only motivated by pecuniary rewards. However, people often strive for interesting activities or just want to stay active, that can especially be observed in children (ibid. p.930). Some 31 million Germans actively work without pay for voluntary and community services (Kranz, 2016). Hence, if the employment circumstances are satisfying, an UBI can even led to an increase in labor supply (Petersen, 2011, p.930). Hohenleitner and Straubhaar (2008, p.32) also state that if an UBI replaces other transfer payments, there is a high possibility that money can be saved in the state budget.

3.3 Global basic income discussion and practice

There are some international as well as country specific networks that serve as a platform for discussions and information exchange concerning UBI. One of the international networks is BIEN which is based completely on volunteer work (BIEN, n.d.c). Founded in 1986, it informs about the latest news, upcoming congresses and events. Another international UBI organization is the Unconditional Basic Income Europe (UBIE) network and it is an affiliate of BIEN (BIEN, n.d.c). UBIE was founded in 2014 following the European Citizens Initiative for Unconditional

⁶ "...unemployed persons with low earnings potential and/or receiving relatively generous unemployment benefits face a situation where taking up employment may lead to little (or no) increase in disposable income as a result of the combined effects of benefit withdrawal and higher tax burdens on in-work earnings" (Carone, Immervoll, Paturot and Salomäki, 2004, p.8).

Basic Income (UBIE, 2016a). Since 2015, UBIE is an international non-profit organization (ibid.). According to the second article of its charter, UBIE strives for an implementation of the UBI as a human right (UBIE, 2016b). The Global Basic Income Foundation (GBI Foundation), that was founded in 2000, expands the idea of a basic income worldwide (GBI Foundation, n.d.).

There are current examples of the introduction of an UBI. For example, in Brazil, the implementation of an UBI is regulated by law and started in 2005 (Zimmermann, 2007). The goal is to reduce hunger and provide dignified life. The implementation takes place in two steps. Firstly, the poorest 20 percent of the population receive a *Bolsa Familia* (family grant) that is meant to secure enough nourishment (ibid.). Nearly 46 million Brazilians receive the grant which supports the reduction of inequality (Pasma, 2009). In a second step, the grant should be transferred into an unconditional Citizen's Basic Income that would ensure a subsistence minimum and would be paid on a monthly or annually basis (Suplicy, 2004, p.1). Another example is the US state Alaska. The idea of the Permanent Fund Dividend (PFD) is based on the use of natural resources (Widerquist and Howard, 2012, pp.3-4). As the state receives revenues from the oil export, it transfers a particular amount to the Alaska Permanent Fund (APF). In 1982 it was decided to pay a dividend to everyone on an annual basis, so that the citizens benefit from the Alaskan oil reserves. In the year 2008, the individual PFD amounted to 3,269 dollars (ibid.) while on average it accounts for about 1,150 dollars (McFarland, 2016a). Beside established basic income schemes, there have been some pilot projects, for example in 2008 in a Namibian village and in 2011 in India (GBI Foundation, 2012). The areas where the projects were conducted have improved in terms of health, economic growth and education (ibid.).

On the European continent, there are further examples of UBI discussions and projects. In 2016, Swiss citizens voted on the introduction of an UBI within the scope of a national referendum. Ultimately, 23 percent voted for an UBI in Switzerland that should amount to about 2,500 Swiss francs⁷ for adults (Martin, 2016). As it was the first time a nation had a referendum regarding the implementation of an UBI model, it initiated various debates about UBI in many European countries (Basic Income Switzerland, 2016). In Finland, the parliament agreed to conduct an experiment on basic income which started in January 2017 (McFarland, 2016b). The monthly amount of 560 euro is received by 2,000 random current recipients of the unemployment benefits. The main goal is to test after two years the change in employment, as the UBI group

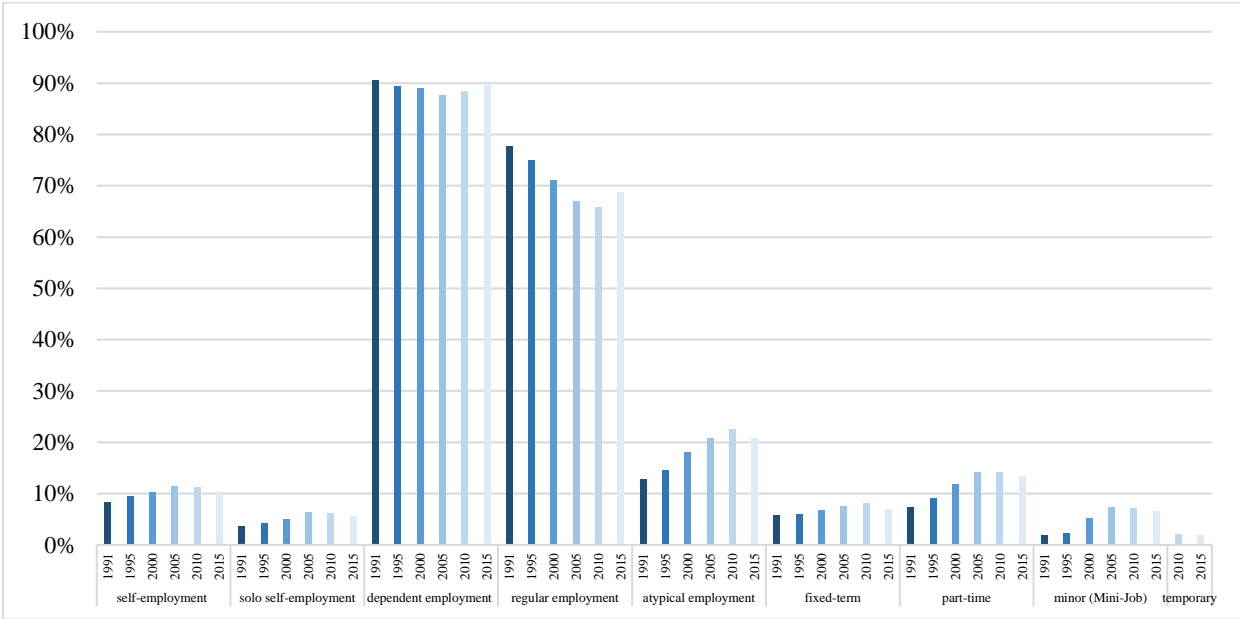
⁷ 2,500 Swiss francs correspond to nearly 2,348 euro (Fx Exchange Rate, 2017).

will be compared to a control group, consisting of unemployment benefit recipients without an UBI (ibid.).

4. Case Germany: Precarity and UBI
4.1 Precarious labor market

Figure 2 is based on the data from the Statistisches Bundesamt (2016) and shows the overall labor market situation in Germany in the time period from 1991 to 2015. Among the dependently employed, the majority has regular contracts (ibid.). Nevertheless, according to the global trend as described by Standing (2014), the number of those regularly employed decreased, from 77.70 in 1991 to 65.82 percent in 2010 while the atypical form became more frequent (Statistisches Bundesamt, 2016). From 1991 to 2010, atypical form of employment increased from 12.79 to 22.61 percent. Among the atypical employment forms, part-time employment was the most frequent contract form, while fixed-term employment and minor employment had nearly the same level of 6 to 8 percent between 2005 and 2015:

Figure 2: German labor market (percentage of total employment)



Source: own representation (based on Statistisches Bundesamt, 2016)

In the beginning of the century, Germany tried to define itself as a social state in new terms and to find a solution for the economic stagnation (Deutscher Bundestag, 2013). This is the reason why in the year 2003, the government of Gerhard Schröder proposed the Agenda 2010 including reforms that concern the labor market and state benefits (ibid.). According to Vogel (2009, p.205), the Agenda 2010 and the corresponding Hartz laws are responsible for the

degradation of the social system and solidarity in Germany. The implemented Hartz laws still cause strong negative critique (Deutscher Bundestag, 2013). The protests concern the *Arbeitslosengeld II* (Unemployment Benefit (UB) II) which replaced the former system of transfer payment – *Arbeitslosenhilfe* (unemployment assistance) and *Sozialhilfe* (social welfare). The main argument of the Agenda 2010 was the reduction of state payments by providing jobseekers with any kind of employment. Consequently, the reform has led to the creation of marginal employment, such as the *Minijobs* which imply a wage of approximately 450 euro, barely any labor-related security and no employee benefits (ibid.).

Hence, the labor reforms in Germany have been created to introduce an income support in the form of the new UB II, that should enable people to accept job offers in the low-wage sector and that should simultaneously reduce poverty (Berthold and Coban, 2014, pp.118-119). However, the labor income of the Germans participating in the labor market has a direct negative impact on the UB II (ibid. pp.119-120). Therefore, although the UB II should reduce the amount of people living at risk of poverty, there is a trend towards increased poverty in Germany (ibid. p.121). The payment does not seem to improve the situation of the recipients, as they tend to prolong their status as unemployed and remain in the unemployment trap. Even if they participate in the labor market, it is often in the form of a Mini-job, a marginal and precarious employment form (ibid. p.122).

4.2 Precarity in Germany

In Germany, well educated people represent the majority of the working population (Crößmann and Mischke, 2016, p.34). Moreover, regarding the young population of 25 to 29 years, more women have a higher educational qualification than men (ibid.). Nevertheless, women in Germany earn 22 percent less than men in 2014 (ibid. p.42). The gap is mainly explained by the different career paths women and men have. Hence, more women are working as part-time employees, have a marginal employment or have career breaks due to childcare (ibid.). Despite these reasons for the gender pay gap, the government of the German chancellor Angela Merkel introduced the *Betreuungsgeld* (child care subsidy) on a national basis in 2013 (Betreuungsgeld-Aktuell, 2017). The payment of initially 100 euro and afterwards 150 euro was paid monthly to every parent raising children at home instead of choosing public daycare center till the third year (ibid.). There were many arguments against the law of child care subsidy. For example, it is not fair to people wanting to continue their career (Standing, 2014, p.106) or the payment could be exploited by migrant families although their children would need to attend a public daycare center in order to integrate in the German society

(Betreuungsgeld-Aktuell, 2017). Ultimately, the child care subsidy was declared unconstitutional in 2015 on a national basis but the federal states Bavaria and Saxonia have maintained the payment within their states (ibid.).

In Germany, family politics and structures foster atypical employment especially for women. The combination of job and family is often regarded as a conflict, whereas many women postpone family planning or decide not to have children at all (Eichhorst and Thode, 2010, p.6). An important reason for this is not only the increasing labor participation of women but also the fact that the income of one person working full-time is not enough to provide for the needs of the family (ibid.). Therefore, the most common family working structure in Germany is a parent working full-time and a parent having marginal employment (ibid. p.4). Nearly half of the German female employees of 20 to 64 years is employed with a part-time contract, compared to 9 percent of men (Crößmann and Mischke, 2016, p.48). Furthermore, as far as public childcare is concerned, Germany has a low supply of daycare centers compared to other European countries (Veil, 2003, p.12). Hence, although many women are not satisfied with the role of a housewife, the family model of two parents working full-time often cannot be realized (ibid. p.13). Furthermore, as Germany has a strong focus on family transfer payments, its investing activities in public daycare centers do not improve the situation effectively (ibid. p.21). Although the amount of children attending a daycare center increased due to the legal claim for a place for a child older than two years, the care quality is often insufficient (Spieß, 2014, p.609). Moreover, particularly migrant children who need a good care quality for a faster integration are in daycare centers with inadequate support (ibid.). Therefore, as migrant children are not sufficiently cared of, the shortage and quality of German daycare centers contribute to the widening of the precariat in Germany.

As it is also shown in Figure 2, the share of people with fixed-term contracts has been approximately 8 percent during the last decade (Crößmann and Mischke, 2016, p.52). However, nearly 40 percent of those fixed-term employed confirm that they would rather prefer a regular contract. The duration of most fixed-term contracts is shorter than a year which makes it very difficult for all the persons concerned to plan for the future (ibid.). Another feature of the German precariat is the low employee participation in further professional training despite the fact that work is becoming more complicated (ibid. p.38). In 2014, only 8 percent confirm that they participate in trainings (ibid.). Moreover, the amount of elderly people of 60 to 64 years still working doubled in the last decade which is another evidence for a growing German precariat (ibid., p.68). This helps most elderly people to escape old-age poverty because of low

pensions (ibid). A further phenomenon is that more Germans have a second job, mostly as a marginal activity (ibid. p.56). The number of people concerned has increased by more than 60 percent since 2005. Especially women often have multiple jobs to be able to provide for the family and their own pension (ibid.). This makes the triple burden a *quadruple burden* (Standing, 2014, p.205). There is also a large share of the German precariat that is academic precariat (Sander, 2012). Especially many of those with a fixed-term contract have a high educational achievement (Crößmann and Mischke, 2016, p.52). This is mainly due to fixed-term projects in the science sector (ibid.). The last recession also contributed to the creation of precarious jobs in Germany (Schmid and Protsch, 2009, pp.6-7). The employment rate among men decreased and about half of the male population has atypical employment (ibid.).

Migrants are also a large part of the German precariat as Germany has a long migrant history. Standing (2014, p.171) considers Turkish guest workers and their families as long-term migrants in Germany. About 500,000 migrants cannot exercise a job according to their education as their degrees are not recognized by the state (ibid. p.162). Regarding the current developments, it can be stated that the asylum seekers in Germany also represent a potential precariat, as they have to wait 5.2 months on average for an asylum decision (Deutscher Bundestag, 2016). During this time, they often live in specific shelters without a possibility to be integrated. This state of uncertainty that lasts about half a year can lead to skill depreciation and a loss of dignity, forming characteristics of the future precariat. In 2016, 722,370 people claimed asylum for the first time, compared to 21,029 a decade earlier in 2006 (Bundesamt für Migration und Flüchtlinge, 2017, p.4). Additionally, one part of the precariat is represented by the functional analphabets who form a group of approximately 7.5 million people in Germany (Grotlüschen and Riekmann, 2011, p.2). Due to their inability to read or write coherent texts, they cannot fully participate in the citizenship (ibid.).

Furthermore, there is a possible relation between the precariat and the German secondary school system (Standing, 2014, pp.124-125). At the age of 10 years, pupils are allocated to three main school types: *Hauptschule*, *Realschule* and *Gymnasium*. The *Hauptschule*, which represents the lowest kind of secondary school and educates future apprentices, is currently an institution for *failing children*. As the system is shifting, more pupils from the middle-grade *Realschule* and the top *Gymnasium* start an apprenticeship, although these schools were initially supposed to educate young people with white-collar professions or university graduates (ibid.). Additionally, further professional education becomes less valuable in Germany. The German apprenticeship is well-known in many countries and is often considered to be the reason for the

economic success (Glover, 1996, p.84; Rinne and Zimmermann, 2012, p.18). However, less young people decide to do an apprenticeship (Standing, 2014, p.123; Bundesministerium für Bildung und Forschung, 2015; Bundesagentur für Arbeit, 2016).

4.3 UBI debate in Germany

In Germany, the debate regarding a basic income emerged especially after the insight that the current poverty and unemployment issues cannot be regulated with the help of the existing control measures (Netzwerk Grundeinkommen, n.d.a). As opposed to the current UB II system, a basic income is regarded as a possible solution for the problems on the German labor market (ibid.). In 2016, a basic income party *Bündnis Grundeinkommen (BGE) – Die Grundeinkommenspartei* was founded with the only goal of achieving a basic income in Germany (Acker, 2016).

There are mainly five implementation models that are discussed in Germany: The Basic Income Proposal by the social entrepreneur and founder of the German drugstore chain DM, Götz Werner (Werner, 2007), the proposal of the Ideal-typical Basic Income of the Hamburgisches WeltWirtschaftsinstitut (HWWI) (Hohenleitner and Straubhaar, 2008), the UBI proposed by the party Die Linke (Die Linke, Bundesarbeitsgemeinschaft Grundeinkommen, 2006), the Green Basic Security (Poreski and Emmeler, 2006) and lastly, the Solidary Citizen's Income (Althaus, 2007)⁸. The table below roughly presents the aforementioned proposals:

⁸ The translations of *Grundeinkommensvorschlag* (Basic Income Proposal), *Idealtypisches Grundeinkommen* (Ideal-typical Basic Income), *Grüne Grundsicherung* (Green Basic Security) and *Solidarisches Bürgergeld* (Solidary Citizen's Income) are taken from Gilroy et al. (2013).

Table 2: Proposed models of basic income in Germany

| Proposal | Author | Amount for adults | Amount for children | Financing |
|----------------------------|--------------------------------------|---|--|--|
| Basic Income proposal | Werner (2007) | 600€ to max. 1,600€ | 300€ | Goods: 50% added value tax |
| Ideal-typical Basic Income | HWWI, Hohenleitner/Straubhaar (2008) | 800€/600€ (200€ insurance voucher included) | | Income: 61%/49% income tax |
| Linke UBI | BAG Grundeinkommen, Die Linke (2006) | 950€ | 475€ | Tax mix |
| Green Basic Security | Poreski, Emmler (2006) | 500€ | 400€ | Income: 25% basic security tax; 25% income tax |
| Solidary Citizen's Income | Althaus (2007) | 800€/400€ (200€ insurance premium included) | 500€ (200€ insurance premium included) | Income: 50%/25% income tax |

Source: Petersen, 2011, p.927

There are also basic income networks and platforms in Germany. The *Netzwerk Grundeinkommen* (Basic Income Network) is a German BIEN affiliate (BIEN, n.d.c). It is a forum for information, news and discussions concerning basic income. Founded in 2004, it consists of individuals and organizations that promote the UBI idea in Germany (Netzwerk Grundeinkommen, n.d.b). The UBI is further actively discussed and researched within the Attac Germany AG *Genug für alle* (Enough for All) (Attac, n.d.), *Freiheit statt Vollbeschäftigung* (Freedom instead of Full Employment) (Freiheit statt Vollbeschäftigung, 2017), *Gewerkschafterdialog – Grundeinkommen* (Trade Unionist Dialog – Basic Income) (Gewerkschafterdialog – Grundeinkommen, 2013), *Grünes Netzwerk Grundeinkommen* (Green Network Basic Income) (Grünes Grundeinkommen, n.d.), *Unternimm Die Zukunft* (Undertake the Future) (Unternimm-Die-Zukunft, n.d.) and *Mein Grundeinkommen* (My Basic Income) (Mein Grundeinkommen, 2017).

5. Precarity and UBI in a macroeconomic analysis

5.1 Argumentation

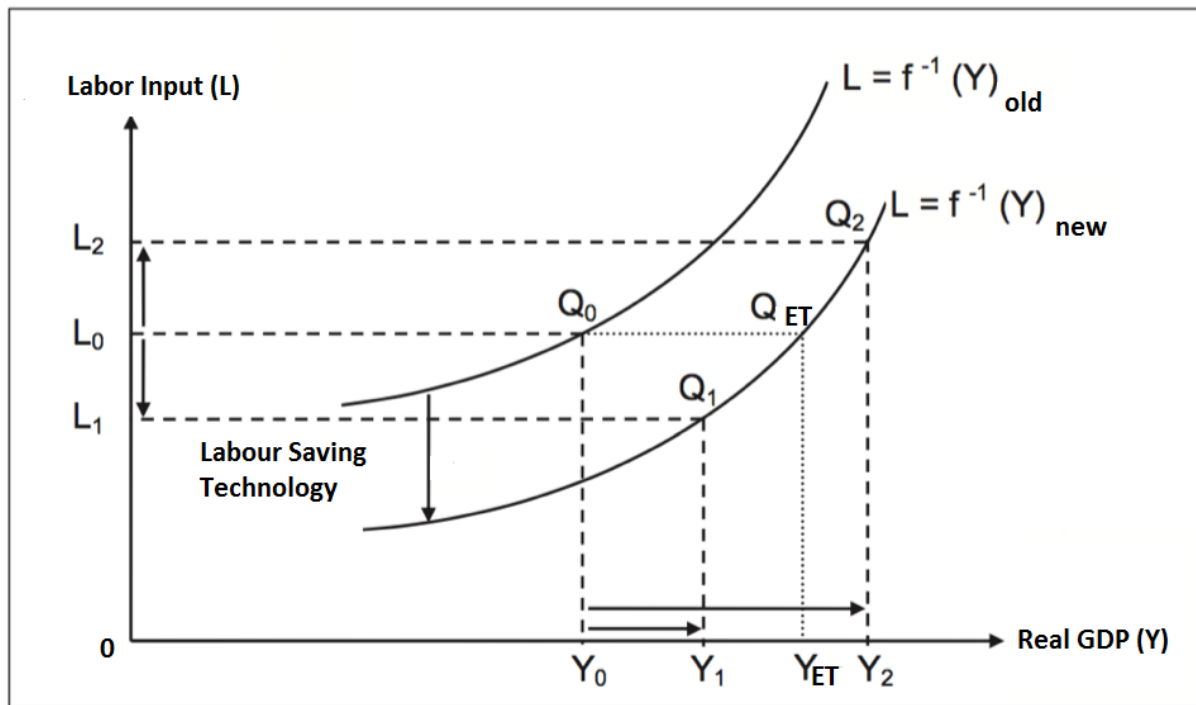
With the help of the UBI, the members of the precariat can theoretically reject an employment that is not appropriate in their particular opinion. This is particularly important for the German precariat due to the Hartz laws. The labor reform of 2003-2005 incorporated sanctions for people who denied a job offer, like payment shortenings of the UB II. Hence, even if sanctions are applied, individuals in the precariat can continue their job search due to the fundamental

security provided by the UBI. Those in the precariat can freely decide upon their labor force participation and hence, start to feel a certain power towards their employers. Such freedom of choice will result in liberation from enforcements and consequently, in a happier working life.

As presented above, there are several reasons why the precariat is formed. The following analysis is based on one cause for precariatization which is technological progress and the resulting *jobless growth* (Petersen, 2014, p.861). The permanent development of technology represents a threat for nearly 60 percent of current German workers (Brzeski and Burk, 2015, p.1). Nevertheless, an improvement in technological processes is crucial for a nation from an economic point of view (Petersen, 2014, p.861). Theoretically, technological progress induces economic growth which implies an increased real GDP⁹ and employment, improved living conditions and social life due to the rise in government's spending (ibid.). However, for simplicity reasons, if the only factor a firms uses as input is labor, an advancement in technology means that labor is reduced (ibid. p.862). As a result, unemployment rises which is a negative effect on the already existing precariat. Nevertheless, the amount of goods increases during the technological innovation and hence, there is a rise in labor demand to handle the risen real GDP (ibid.). The overall effect on employment is presented in the following Figure 3.

⁹ The real GDP represents the volume of all goods, including services that an economy creates in a particular year (Petersen, 2014, p.861).

Figure 3: Technological progress and the level of employment



Source: adapted from Petersen, 2014, p.862

Figure 3 illustrates the interaction between labor saving technological progress (*jobless growth*) and employment enhancing growth. Assuming for simplicity a simple production function which produces X units of real GDP (Y) with only the input factor labor: $X = f(L)$. The inverse function is $L = f^{-1}(X)$. The conditional employment level during a phase of technological progress depends on the degree of economic growth that is represented by the real GDP (Petersen, 2014, p.862). If a country has an economic growth that corresponds with a real GDP of Y_1 (a shift from the “old” curve to the “new” curve in the graph), the employment reducing effect of the technological progress prevails and the unemployment rate rises. The necessary employment threshold (ET) needed for full employment compensation is Y_{ET} (reflecting the original full employment level Q_0) and the employment rate rises only if the real GDP exceeds this level of economic growth. Consequently, every time the economy grows by less than the needed employment threshold Y_{ET} , the situation is called *jobless growth* (ibid.). Technology induces a reduction of labor employment and may not be complimentary to labor input as in the historical past.

The concept of jobless growth is an important aspect in understanding the emergence of the precariat in Germany. When the labor market equilibrium, as shown in Figure 3, decreases from Q_0 to Q_1 , more people enter the precariat. Whether workers are dismissed directly because of

new technologies or fear job loss due to new automatization processes, they share the precarious living situation. A jobless growth was first detected in the US in the 1990s as a contradictory phenomenon to the Okun's Law¹⁰ (Khemraj, Madrick and Semmler, 2006, p.3). In Germany, the real GDP increased from 84.2 index points in 1991 to 111 index points in 2012 but the total amount of labor hours decreased from 60,082 million in 1991 to 58,147 million in 2012 (Statistisches Bundesamt, 2013, p.321/344). It is important to observe the development of the volume of work rather than the unemployment rate in order to state that there is a jobless growth in Germany (Petersen, 2014, p.862). Thus, the decrease in unemployment and work hours as well as the simultaneous increase in the number of people at risk of poverty are possible indications for the growing German precariat (see further Brady and Biegert (2017)).

Therefore, economic prosperity in a country can be increased without a rise in employment (Petersen, 2014, p.863). According to economic laws, as the demand for a particular good decreases, its price adjusts downwards. Hence, when firms decrease their labor demand due to technological progress, employees adjust the price for work which is represented by their wage. Unemployed individuals will offer their work for a lower wage in order to become employed. The phenomenon can be observed in Germany where the low-wage sector and working poverty are growing (ibid.). As Petersen (ibid. pp.863-864) states, there are two possibilities. The employment rate can either be increased while workers receive lower wages or the wages can be kept stable which leads to a higher unemployment rate. The author proposes governmental transfer payments in case the wage does not assure a minimum living standard (ibid. p.864). In the following hypothetic analysis this transfer payment is the UBI.

The idea is to observe how different degrees of precarity and the implementation of an UBI affect economic growth and ultimately, the employment level. When the employment level in Figure 3 increases as a result of a risen real GDP (Q_2), it implies that the labor demand increases. This is crucial for the precariat issue as the labor market situation changes and the members of the precariat can benefit from the emerging bargaining power. Hence, they can negotiate higher wages enabling higher consumption due to higher disposable income levels and, most importantly, the seven labor-related securities presented in Table 1.

The following approach will be based on Figure 3 and on the assumption that only when the

¹⁰ "Okun's Law pertains to the relationship between in U.S. economy's unemployment rate and its gross national product (GNP). It states that when unemployment falls by 1%, GNP rises by 3%. However, the law only holds true for the U.S. economy and only applies when the unemployment rate falls between 3% and 7.5%" (Investopedia, 2017).

real GDP, which represents economic growth, exceeds the employment threshold Y_{ET} , the labor demand can rise. According to general economic conditions, the supply increases when demand increases. Thus, the real GDP, which is the value of all goods and services produced, will increase if the consumption goods and services demand increases. Consumers tend to rise their consumption demand when there is an increase in disposable income. The following Figure 4 shows the line of argument:

Figure 4: Line of argument of the macroeconomic approach



Source: own representation

The analysis will not focus on the effect of UBI on labor supply, as it was done elsewhere (Gilroy et al., 2013). Instead, it will examine the situation on the goods market and observe the change in consumption goods demand through the following cases:

Table 3: Analysis cases

| Consumption goods demand case | Degree of precarity | UBI payment |
|--|---------------------|-------------|
| 1. Secure individual without UBI | $P = 0\%$ | UBI = 0€ |
| 2. Strong precariat member without UBI | $P = 70\%$ | UBI = 0€ |
| 3. Strong precariat member with UBI | $P = 70\%$ | UBI = 600€ |
| 4. Medium precariat member with UBI | $P = 30\%$ | UBI = 600€ |
| 5. Light precariat member with UBI | $P = 10\%$ | UBI = 600€ |
| 6. Secure individual with UBI | $P = 0\%$ | UBI = 600€ |

Source: own representation

In this analysis, P is a percentage that measures the seriousness of the precarious living situation. As it can be seen in Table 3, the precariat class is divided in *strong* ($P = 70\%$), *medium* ($P = 30\%$) and *light* ($P = 10\%$)¹¹. The first hypothesis (H_1) of this analysis is that consumption goods demand will rise from the first to the sixth case. There are three main reasons for this assumption. First, the demand will increase due to the rise in disposable income because of the UBI payment. Second, the reduction in the degree of precarity P will improve the material situation of the individual in the model which implies an additional income for consumption. Third, when the UBI approach is introduced to the model in the third case, the

¹¹ The fragmentation of the precariat class in strong, medium and light is applied by the authors of the paper for simplicity reasons.

labor supply might even increase, as explored by Gilroy et al. (2013). The second hypothesis (H_2) concerns the effect of the UBI implementation. It is assumed that the additional income provided by the basic security will decidedly increase the consumption goods demand in case three as compared to case two. The third hypothesis (H_3) is that in case six, the demand is higher than in case one due to the additional income in the form of an UBI. All aforementioned hypotheses support the line of argument in Figure 4 that with the increase in disposable income which is represented by the proceeding from case one to six, the consumption goods demand increases. Consequently, the GDP will rise leading to an economic growth which initiates an increase in employment. Ultimately, the number of people in the precariat is reduced.

In order to incorporate the degree of precarity P and the UBI into the budget constraint of the individual, Gillman's (2011, p.16) consumption goods demand equation ($c^d = wl^s + \Pi$) has to be adjusted:

$$c^d = (1 - P)(wl^s + S) + \Pi \quad (5.1)$$

where c^d is the individual's consumption goods demand, w is the real wage rate, l^s is the amount of time T ($T = 24$ hours and $T = l^s + x$) that an individual spends working instead of enjoying leisure x , and Π is the profit the firm generates from supplying consumption goods. In this simplified model, the profit is completely transferred to the consumer (Gillman, 2011, p.21).

As a precarious living situation has an impact on disposable income, it is introduced into the equation by removing a specific share of the income $(1 - P)$. Additionally, the disposable income for consumption is expanded by a new variable S that represents the social income. As aforementioned, the precariat members have a lower social income than people in secure circumstances. The precariat lacks support claims within their family and community and they cannot claim additional benefits (Standing, 2014, pp.18-20). UBI is introduced to the budget constraint with the variable G for governmental transfer payment:

$$c^d = (1 - P)(wl^s + S) + \Pi + G \quad (5.2)$$

The finance issue in this model is solved by an implicit tax and by specifying that wl^s is a real middle net income of a single household. Other parameters such as the productivity parameter A_G where subscript G represents the goods output sector, γ and α specified as part

of utility and technology specifications as applied by Gillman (2011) and T the *allocation of time constraint* assumed here that time available for labor l and leisure x in general terms sums up to the amount T , are adequately calibrated ($A_G = 1, \gamma = 0.5, \alpha = 1, T = 24$) and correspond with the specification of Gillman (ibid., p.78). The social income S is approximately set to a half of w ($S = 0.5w$) for simplicity reasons because it is a very individual value and it is generally difficult to quantify personal data, such as private benefits or family support claims. Regarding the UBI, it is adapted to the German case. As aforementioned, wl^S is the real middle net income of a single household which was approximately 1,433 euro in 2014 (Wirtschafts- und Sozialwissenschaftliches Institut (WSI), 2017). The analysis is based on the example of a single household because this form of living is rising (Standing, 2014, p.111). As the real middle net income has increased on average by 25 euro per year since 2011 (WSI, 2017), it reached about 1,483 euro in 2016. Therefore, it is assumed that the real middle net income in 2016 accounted for approximately 1,500 euro. The amount of the UBI, which is fixed to 600 euro net payment, corresponds with other analyses (Hohenleitner and Straubhaar, 2008, p.33; Gilroy et al., 2013, p.47). Hence, the UBI amounts to 40 percent of the real wage rate w ($G = UBI = 0.4w$) if one considers a 40 hours per week employment whereby the UBI represents additional income per work hour¹³.

It might be concluded from $G = UBI = 0.4w$ that the higher the real wage rate w the more UBI the agent receives as a net payment. However, the six cases can be interpreted as a hypothetical week of 40 hours, included Saturday, with a fix real wage rate during the day ($T = 24$). On Monday (case 1) the person is secure and receives a fixed-term contract on Tuesday (case 2) as a contract extension and has to change the workplace and position for a project in another location of the multinational company. On Wednesday (case 3) the UBI is introduced in Germany. On Thursday and Friday (case 4 and 5) the labor-related securities (Table 1) are improved, for example, the person is promised a permanent position in one location. On Saturday (case 6), the agent receives a regular contract. In all cases, it is theoretically assumed that the real wage rate w remains the same and that the influence on the consumption goods demand c^d results from other calibrations, such as the degree of precarity P and the implementation of the UBI G .

For simplicity, the model is formulated here as a closed decentralized economy with separate consumer and firm maximization problems. The corresponding goods demand equations are

¹³ It is further assumed that the agent works 40 hours per week in a month with 30 days.

already formulated in (5.1) and (5.2). The firm, as producer and supplier of consumption goods, has the following Cobb-Douglas production function that also corresponds with Gillman (2011, p.79):

$$c^s = y = f(l^d) = (l^d)^{0.5} \quad (5.3)$$

5.2 Calibration

The first case is that of the secure individual without an UBI. Therefore, the calibration in this case is $A_G = 1$, $\gamma = 0.5$, $\alpha = 1$, $T = 24$, $P = 0\%$, $S = 0.5w$ and $G = UBI = 0$. The consumption goods demand is presented as:

$$c^d = (1 - 0)(wl^s + S) + \Pi$$

and the consumer maximization problem is:

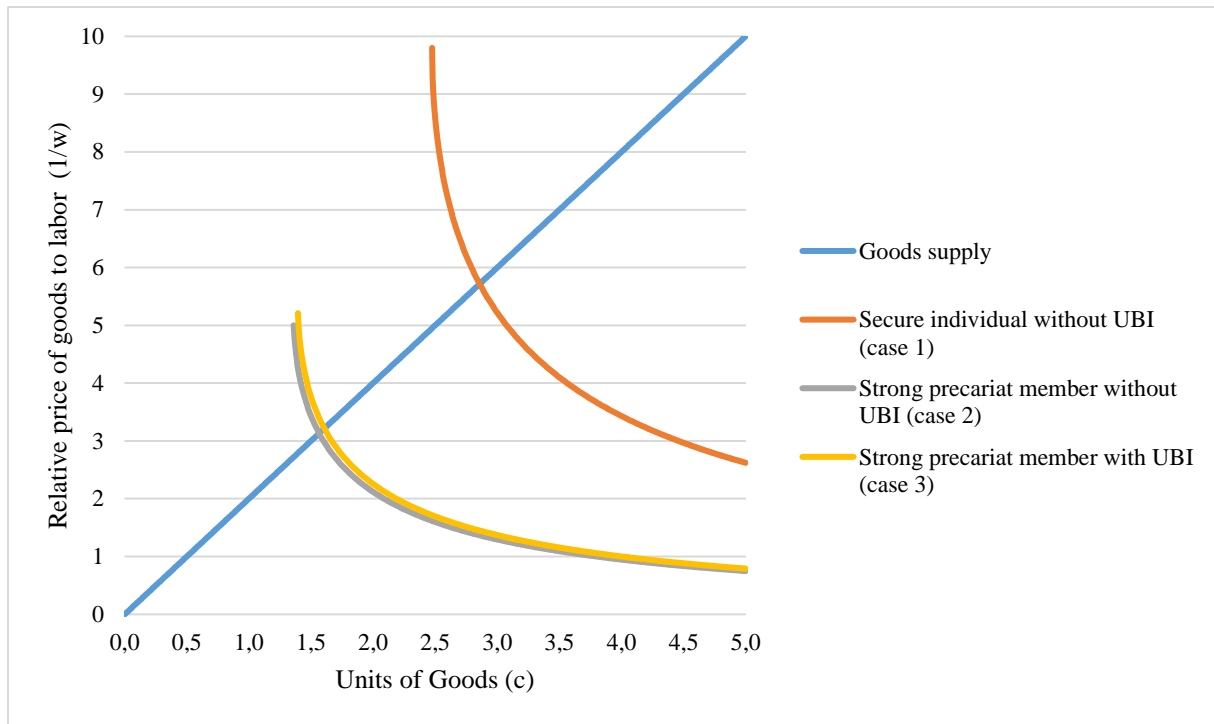
$$\begin{aligned} u(c^d, x) &= \ln(c^d) + \ln(x) \\ \max_{l^s} u &= \ln(wl^s + S + \Pi) + \ln(24 - l^s) \end{aligned}$$

The firm maximization problem is:

$$\max_{l^d} \Pi = (l^d)^{0.5} - wl^d$$

For a better comparison, the second and third cases are calculated with the corresponding changes in the calibration, whereas the maximization problem of the firm in all of the following cases remains identical. The first three cases are displayed in the Figure 5 below:

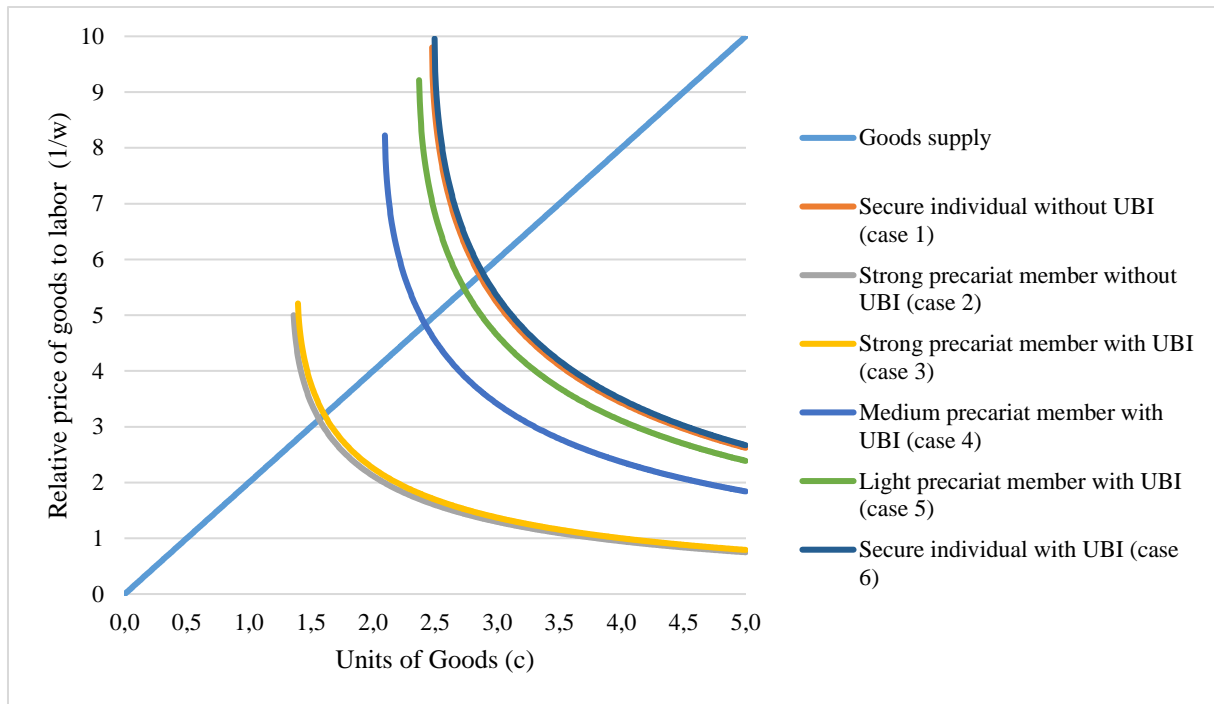
Figure 5: Aggregate goods supply and demand (case 1, 2 and 3)



Source: own representation

The fourth case is the one of a medium precariat member who receives an UBI of $G = 0.4w$. In this case, the degree of precarity is reduced to 30 percent ($P = 0.30$). In case five, the degree of precarity P is further diminished and accounts for 10 percent ($P = 0.10$), while the agent still receives an UBI. Finally, the sixth case contains a consumption goods demand c^d and a maximization problem of a secure individual who receives an UBI. The following Figure 6 presents all six cases:

Figure 6: Aggregate goods supply and demand (all six cases)



Source: own representation

6. Results

Figure 5 displays the consumption goods demand c^d of cases one, two and three together with the consumption goods supply c^s . The upward curve represents the goods supply while the goods demand is displayed by the downward curves. As it can be seen, the secure individual has a higher consumption goods demand c^d due to a higher income than the strong precariat member. The latter experiences an extreme cut in the labor income as well as in the social income. The agent in case one takes advantage of the full amount of labor and social income and hence, has a consumption goods demand of about 2.86 units of goods, compared to only 1.57 units demanded by the strong precariat member (case 2). Therefore, the demand in a secure situation is nearly twice as high than the demand in the strong precariat situation. Case three shows the change in the consumption goods demand c^d of a strong precariat member after the implementation of an UBI (600 euro). The goods demand rises in case three due to the additional income. However, the rise is barely pronounced with a shift from 1.57 units of goods (case 2) to 1.61 units of goods (case 3). Therefore, hypothesis H_2 , assuming that the introduction of an UBI in case three will decidedly raise the consumption goods demand, cannot be confirmed. However, this result shows another important aspect of the UBI. One of the main critiques regarding the introduction of an UBI, is that it will allow people to keep a certain standard of living while ceasing to participate in the labor market. As it can be seen in Figure

5, the demand in case three is only slightly higher than in case two, meaning that the agent still cannot afford the same consumption demand as a secure individual without an UBI (case 1). This is because an amount of 600 euro is not an income that most German citizens can rely on without working but is rather only a fundamental security.

All cases are ultimately shown in Figure 6. It can be observed that the reduction in the degree of precarity P has an pronounced impact on the consumption goods demand c^d . As the agent becomes a member of the medium precariat with $P = 0.30$ (case 4) and simultaneously receives an UBI, the goods demand increases to 2.42 units. As the reduction in P proceeds, the consumption goods demand rises. Thus, the agent who is a member of the light precariat with $P = 0.10$ (case 5) can demand approximately 2.74 units. Lastly, when the degree of precarity equals zero (case 6) and the agent still receives an UBI, the consumption goods demand c^d is higher than that of the secure individual without UBI (case 1). While in case one, the agent demands about 2.86 units, he or she can demand 2.88 units in case six. Analogously to the change in the goods demand of the strong precariat member (case 2 and 3), the result in case six implies that a secure individual cannot consume a much higher amount of goods only because an UBI is transferred. Therefore, a secure individual will probably not rely on the UBI as the only source of income but will continue to participate in the labor market.

Thus, although hypothesis H_2 cannot be confirmed, hypotheses H_1 , assuming that the demand will increase with every case from one to six and H_3 , that in case six, the goods demand will be higher than in case one can be confirmed. This means that even if the UBI does not raise the goods demand much, together with the effective reduction in the degree of precarity P , the consumption goods demand c^d does increase. Hence, as in the line of argument (Figure 4), as the goods demand increases, the supply of goods and services, represented by the real GDP, will increase. This will eventuate in an economic growth with which the level of employment will rise. The precariat will benefit from the increase in labor demand, as it will be in a better bargaining situation and can then negotiate contracts with further reduced degree of precarity P . Consequently, the precariat can be diminished.

Hence, there is a possibility to reduce the amount of people in the current German precariat. However, the introduction of an UBI is not enough to effectively raise the real GDP. The currently existing labor market system should be reformed, so that the degree of precarity is reduced and contracts are negotiated in a way that labor-related insecurities are as minor as possible. New regulations regarding dismissal protection are required in order to facilitate

greater security, which will lead to an increased stability, goods demand and economic growth. While employers should increase labor-related security, for policy makers this implies that the UBI should be viewed as a potential form of new social and labor security that can help dealing with poverty and social exclusion issues. Therefore, the UBI is a possible solution for the growing German precariat.

7. Conclusion

The paper shows that there is a class-in-the-making, called the precariat. It does not only have negative aspects, as there are individuals who prefer having project-like employments or those who view precarity as a temporary step in the career. However, it also shows that precarity influences the perception of time and the structure of life. People from almost every social and demographic group can be members of the precariat, whereby the commodification of education and knowledge is an important reason for this development. The growing precariat has serious social, health and economic consequences. Not directly linked to the precariat but to global inequality and poverty issues, the UBI is discussed and already successfully implemented in some locations.

Beside the global precariat, the analysis indicates that there are strong signs for a precariat in Germany (Brady and Biegert (2017)). The labor market situation confirms that there are many Germans in atypical employment while often, flexible work is not pursued voluntarily. The Agenda 2010 and the Hartz laws contributed to the creation of the precariat in Germany that can be confirmed nearly in all demographic groups. Furthermore, low investments in early education as well as a discriminatory secondary school system enhanced precarity in Germany. In parallel to these developments, the idea of an UBI is discussed in Germany. After performing the analysis by incorporating precarity and UBI in a macroeconomic model, the results suggest that an UBI represents a possible way to reduce the precariat. People in the precariat can thus have a fundamental security and the possibility to deny undesired employment. However, other measures, like the reduction of labor-related insecurities, are crucial to effectively reduce precarity.

As every research based on a model, this analysis has limitations. There are various possibilities of introducing an UBI. In this analysis, only one method was applied, namely the proposal of HWWI which includes a 600 euro monthly net payment. Nevertheless, this particular amount of an UBI was repeatedly mentioned in the literature (Hohenleitner and Straubhaar, 2008, p.33; Gilroy et al., 2013, p.47). The analysis did not include indirect effects on parameters in the

calibration. It is probable that due to the UBI and the reduction in the degree of precarity, employees might be more satisfied with their job and increase productivity. Thus, the parameter A_G (productivity parameter) could be adjusted. Otherwise, the calibration in this paper corresponds with that of modern macroeconomic analyses (Gillman, 2011), so the parameters are set according to similar models in this field of research. Future research can compare various UBI approaches with different amounts of payment and regulations because the external conditions of an UBI may play an important role on the effect in Germany. The calibration in the model can further be adjusted. Beside the adjustment of A_G , a calibration of a particular financing model could be included in the analysis as it is an important critical aspect of the UBI approach. Moreover, the issue of time squeezes and work-for-labor can be introduced into the model by hypothetically reducing the amount of disposable time T . Finally, it would be interesting to include into further research the results of the current UBI projects, such as that in Finland, in order to update the model with new insights.

As Jeremy Rifkin (1995, p.297) wrote in his book “The End of Work” in 1995:

“In the debates over how best to divide up the benefits of productivity advances, every country must ultimately grapple with an elementary question of economic justice. [...] Since the advances in technology are going to mean fewer and fewer jobs in the market economy, the only effective way to ensure those permanently displaced by machinery the benefits of increased productivity is to provide some kind of government-guaranteed income.”

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