## UNIVERSITY OF WUPPERTAL BERGISCHE UNIVERSITÄT WUPPERTAL

EUROPÄISCHE WIRTSCHAFT UND INTERNATIONALE MAKROÖKONOMIK



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## After Eastern German State Elections 2019: Germany Facing Serious Politico-Economic Problems

EIIW Diskussionsbeitrag 263 EIIW Discussion Paper 263



Europäische Wirtschaft und Internationale Wirtschaftsbeziehungen European Economy and International Economic Relations

ISSN 1430-5445

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## September 2019



Herausgeber/Editor: Prof. Dr. Paul J.J. Welfens, Jean Monnet Chair in European Economic Integration

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JEL classification: D63, D72, D74, D78

**Key words:** State Elections, Eastern Germany, German Unification, Populism, AfD,

Inequality, Fears

#### **Summary:**

The state elections in the former East German states of Brandenburg, Saxony and Thuringia stand for a rise of the right-wing *Alternative für Deutschland* (AfD) [Alternative for Germany], a relatively new populist party which was created in 2013. This party has won seats in all state parliaments and also has achieved a considerable voting share in the European Parliament elections in 2019 and the federal German Parliament in 2017; the voting shares obtained in the state elections of Brandenburg and Saxony were close to 25% and thus force the traditionally leading parties CDU (Christian Democrats) and SPD (Social Democrats) to form broader coalitions that take on board at least a third party. There are apparent reasons for the expansion of the AfD; the makeup of the current German government – a grand coalition of center right (CDU) and center left (SPD) – and its weak policy play a strong role in this. Germany's economic system is facing major new adjustment problems and people, at least in eastern Germany, continue to face considerable personal and other fears. The situation in 2019 has improved, however, in western Germany. Major policy initiatives and reforms are needed to successfully cope with the challenges in Germany and the EU, respectively.

### **Zusammenfassung:**

Die Landtagswahlen in den neuen Bundesländern Brandenburg, Sachsen und Thüringen stehen für den Aufstieg der rechten Alternative für Deutschland (AfD), einer relativ neuen populistischen Partei, die 2013 gegründet wurde. Diese Partei hat Sitze in allen Landesparlamenten errungen und auch bei den Wahlen zum Europäischen Parlament 2019 und zum Deutschen Bundestag 2017 einen erheblichen Stimmenanteil erreicht; die bei den Landtagswahlen in Brandenburg und Sachsen erzielten Stimmenanteile lagen bei knapp 25% und zwingen damit die traditionell führenden Parteien CDU (Christdemokraten) und SPD (Sozialdemokraten) zu Koalitionen, die zumindest einen Dritten mit einbeziehen. Die Gründe für den Aufstieg der AfD liegen auf der Hand: Die Zusammensetzung der aktuellen Bundesregierung - eine große Koalition aus Mitte-Rechts (CDU) und Mitte-Links (SPD) – und ihre biedere Politik spielen dabei eine wesentliche Rolle. Das deutsche Wirtschaftssystem steht vor erheblichen neuen Anpassungsproblemen, und die Bürgerinnen und Bürger, zumindest in Ostdeutschland, sehen sich weiterhin mit persönlichen und anderen Ängsten konfrontiert. In Westdeutschland hat sich die Situation 2019 jedoch verbessert. Um die Herausforderungen in Deutschland bzw. in der EU erfolgreich zu bewältigen, sind umfangreiche politische Initiativen und Reformen erforderlich.

**Acknowledgements:** I am grateful for technical support/editing by David Hanrahan and Samir Kadiric as well as Arthur Korus, EIIW/ University of Wuppertal. The usual caveat applies.

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# 1. Regional Elections in Eastern Germany and Economic Problems

After the two regional elections in eastern Germany – in Brandenburg and Saxony on September 1, 2019 – the German political and economic system is facing serious structural challenges: The relative victory of the SPD in Brandenburg and of the CDU in Saxony, with both parties experiencing major losses in voting shares albeit avoiding being overtaken by the right-wing AfD, reinforce to some extent the grand coalition which could be interpreted as maintaining political stability in Berlin. At the same time, the relative gain of the AfD - which roughly doubled voting shares in both states to a level of more than 20% - reinforces the position of the AfD in a dramatic way in eastern Germany and indeed in the whole of Germany. Part of the AfD gains stem from voters switching from the left wing Die Linke party and from the CDU and the SPD, but the highest gains came from the mobilization of previous non-voters. The Green Party improved its position, but its gains were clearly smaller than predicted in opinion polls. As regards an interpretation of the voting results in the two eastern German states, one may point out that these results are part of a more long-term policy shift in Germany - with a common denominator, namely a continuous rise of the AfD which is itself undergoing an ever stronger shift to the right over time in key policy fields. Traditional parties have as yet found no approach to contain the right-wing movement and there is a risk that the party created in 2013 could further improve its position in elections in the medium term.

The higher turnout of voters signals that German society has become more politicized than before. This is partly reflecting the internet society which encourages millions of rather poor people to interact in a new way and to have a political voice which previously was not heard by the mainstream. This year state elections are taking place in a period where the economic upswing is ending in the Eurozone and Germany, respectively; 2020 will be less dramatic politically since only Hamburg will have a state election, but there are important local elections in both eastern and western Germany - before several state elections and the national election in autumn will raise the political stakes very strongly. There are several crucial challenges lying ahead for the grand coalition and each field could become a new driving impulse for the AfD:

- Germany and the Eurozone seem likely to face a recession in 2019/20 and traditional industries such as the automotive sector and machinery and equipment production could be strongly negatively affected. Germany's Minister of Finance Olaf Scholz seems to be quite hesitant to stimulate the economy and the government's fiscal room to maneuver is rather small, namely a structural deficit-GDP ratio (structural means: without cyclical components) of a maximum of 0.35% which could translate with a cyclical component of another 0.35% to about 0.7% of GDP which would be an adequate impulse for a normal recession, but not for a strong recession. Scholz, the Minister of Finance, is also not giving the public much confidence when he stated (on television in September 2019) that digitalization and globalization have brought new uncertainties that one cannot understand.
- For some years, the German government has wanted to adopt a pension reform but the coalition partners have not been able to find a compromise for the so-called basic pension ("Grundrente").

- The grand coalition has come under pressure to improve infrastructure services; Germany suffers from a lack of broadband coverage in almost all regions of the country. There is no convincing concept so far that Germany – or the state of North-Rhine Westphalia (adjacent to the Netherlands and having roughly the same population) – could quickly catch up with the Netherlands or other leading EU countries.
- Government is also facing problems with the quality of services of the state-owned railway system; punctuality statistics are miserable both in the field of high speed trains and in the field of regional commuter services. The Deutsche Bahn AG has not made any major progress in recent years the daily statistical figures on punctuality which were published a couple of years ago have been discontinued as the performance has worsened. Compared to Switzerland, the punctuality of trains is about four times as poor in Germany.
- There is enormous pressure on government is in the field of climate policy. Germany is going to fail achieving its goals for 2020, the proposed reduction of 40% of CO2 emissions will not be achieved; and until mid-September 2019 government had no plan how to improve climate policy in a situation in which external pressure – e.g. from the European Fridays for Future protest movement (under the leadership of Greta Thunberg from Sweden) – is mounting. Worse, the preferred policy options for the conservative CDU, and its Bavarian sister party CSU, is to introduce a new national emission certificate trading system for part of the 55% of emissions not covered by the EU emission trading system (ETS), while the social democratic SPD seems to strongly favor the introduction of CO2 taxes. It would be much better to simply broaden the EU's ETS system in order to cover 85%-90% of all emissions. In 2020, Germany will, for the first time, face the situation that its violation of CO2 mitigation goals will force government to pay a fine to the EU Commission. The lack of emission reduction policy in the field of local and regional NOx emissions – thus violating EU laws – has brought about, based on the decisions of German courts, a situation in which diesel cars can no longer be driven in the center of more than a dozen German cities unless they meet one of the latest, ambitious emission standards. This implies significant losses for millions of owners of older cars which are often only a few years old.
- The planned rise of the share of renewable energies in electricity generation is no longer making big progress since investment and the building of North-South grid links is partly blocked by regional protesters or protests be environmental groups so that new offshore wind farms cannot sell all the power generated due to bottlenecks in the grid and government has to make compensation payments to the wind farms. At the same time, government has adopted a new plan according to which coal mining will stop in 2038 at the latest, which is a negative economic signal to three states in eastern Germany, including Brandenburg, Saxony and Saxony-Anhalt.

One might argue that the two state elections in Brandenburg and Saxony – plus one more election which is upcoming in Thuringia in late October 2019 (also one of the states of the former East Germany) - are not very important since the combined population is only about 8 million people which is  $1/10^{th}$  of Germany's population. However, with both the conservative CDU and the social democratic SPD losing considerable votes – actually part of the loss amounts to reinforcing the AfD – there is a message that the incumbent parties have no convincing idea how to stop the rise of the AfD. Moreover, with a high growth in terms of the voting shares in state elections in eastern Germany, not only is the political

basis of the AfD reinforced at the regional level, but also the overall resources commanded by this rightwing populist party (whose voters are more often men than women; and also rather often, both in western Germany and in eastern Germany, rather young age groups, particularly in the 20-59 age bracket). With such a big share of votes in the German Parliament and in state parliaments, the AfD can also expect to get more influence in public TV channels which in turn could contribute to the expansion of the AfD.

## 2. Economic Aspects of the AfD Expansion

The AfD's program is anti-immigration, anti-gender-mainstreaming, anti-EU integration and it emphasizes that there is no global warming caused by man-made impacts. As regards EU integration, the AfD would like to dissolve the European Parliament (MEUTHEN, 2019) which they consider as unnecessary; it is, however, quite doubtful to have a supranational policy layer in the EU – e.g. in the field of EU trade policy since 1958 and, since the Treaty of Lisbon (came into effect in 2009), in the field of international investment treaties – and an EU budget if there is no control through a European Parliament. Even the predecessor of the EU, the European Coal and Steel Community (1952-1957) had a Parliamentary Assembly. In the European elections of May 2019, the AfD has strongly increased its share of votes, namely from 7.1% in 2014 to 11% in 2019; another big winner in these elections was the Green Party (20.5%, up by 9.8%), while the CDU, the SPD and Die Linke have suffered considerable losses (FG WAHLEN, 2019).

Previous analysis of the FG WAHLEN has shown for the 2014 elections that voters in Germany do not consider the EU elections as really important and also do not understand the policy fields for which the EU Commission and the EU Parliament are responsible which has the consequence that many voters have a tendency to vote rather often for small and radical parties. 57% of AfD voters have indicated that they have voted for the AfD because of its political program, hence one cannot argue that the AfD consists mainly of voters who simply want to protest against the mainstream parties; it is also remarkable that the majority of AfD voters (78% of those) wants a lower profile of the EU and more national policy autonomy, while the majority of the other voters (about 60%) holds the view that the role of the EU should be reinforced in the future (FG, WAHLEN, 2019).

The AfD has a critical view of EU integration policy but also at key fields of national government policy in Germany. At the national level, in German policy debates the AfD also points out that the expansion of renewable energy is undermining the stability of the electricity grid and thus the phasing out of nuclear energy in 2022 and of coal in 2038 is creating a risky environment for the production of electricity. This view, however, is a bit strange as it overlooks that the liability insurance which is required of nuclear power plants is only  $\in$  2.5 billion which is  $1/2500^{th}$  of what the maximum expected damage in the case of a serious incident would be; the cost of the Fukushima nuclear accident can be estimated to be close to  $\in$  200 billion and the Japanese taxpayer has footed that bill as Japan's nuclear power plants have the same structural problem of an insufficient insurance as in Germany and other OECD countries (HENNICKE/WELFENS, 2012). Thus there is a hidden large

subsidy for risky nuclear power generation in Germany as well as in other OECD countries, including the US with a similar implicit subsidization.

Finally, the AfD emphasizes the problem of public insecurity through immigration plus nationalism and has a pro-Russia policy stance. Eastern Germany is considered to be a victim of the Western embargo policy against Russia imposed by the Western countries after the annexation of the Ukrainian Crimea in 2014. Thus the AfD has positioned itself as a defender of eastern German economic interests in particular; eastern Germany's economy traditionally had considerable economic links to Russia/the Soviet Union. To some extent, the strong losses suffered by Die Linke in the state elections in Brandenburg and Saxony – a left-wing party that is based on former official party groups in the German Democratic Republic (i.e. former East Germany) – seem to indicate that the AfD has become the new leading protest party in eastern Germany. The voting analysis of the Forschungsgruppe Wahlen for the European Parliament elections in 2019, however, indicates that AfD support is not solely comprised of protest voters but that the party has also established a strong core of non-swing voters (FG WAHLEN, 2019).

The power potential of the AfD has thus grown in 2019: The latter reflects the fact that the AfD now has a new record number of sitting parliamentarians – with the supranational EU level, federal level and regional level combined -, jobs on offer – actual positions and many imagined ones, namely those linked to further voting rounds with favorable results – and additional funding. There is also a growing presence of AfD on TV and in the institutions responsible for oversight of public TV; here election gains help AfD to gain influence and stronger visibility vis-à-vis the public. As regards funding: The German electoral system gives automatic public funding for every vote obtained by political parties and raising donations from the private sector is also facilitated if voting shares are high. Hence the prospects for the right-wing populist AfD to achieve further increases in voting shares in Western Germany as well as in eastern Germany are considerable and this would amount to a serious politico-economic destabilization of Germany as a whole.

An economic destabilization effect could become visible with less foreign direct investment (FDI) inflows into regions with very high AfD voting shares – particularly in the former East Germany where a high share of voters already consider themselves as facing adverse economic developments and being treated as second-class citizens. This is a view particularly held by AfD voters. With lower regional FDI in eastern Germany, the prospects of weaker economic development are reinforced and this could become a vicious economic and political spiral in eastern Germany. The prospects for an expansion of right-wing populism are strong, not least since Germany is likely to face reduced medium-term economic growth, negative real interest rates and enhanced structural changes – not least in the context of climate policy – in the years ahead.

The growth rate of eastern German states in 2018 has fallen below the national average. Besides the small western German state of the Saarland – with a negative growth rate of real GDP – and weak growth rates in both North-Rhine Westphalia and Lower Saxony, all facing problems in the automotive and steel industries, the growth rates were lowest in the east German states. Brandenburg and Saxony were, however, the leaders in the weak pack of those states – but growth rates of 1.4% and 1.2%, respectively were only about 2/3<sup>rds</sup> of the real GDP growth rate of the leading western German states. Brandenburg benefits structurally from positive spillover effects from Berlin and both states, as well as Saxony, also enjoy from the influx of Polish entrepreneurs and workers (otherwise these have a

preference to settle in west German states). Among the weak points frustrating many voters in eastern Germany is that high speed internet coverage as well as railway services are rather weak – despite all promises of the federal government. Eastern Germany has suffered from the intra-German migration of workers towards the former West Germany, the recent increase in population is largely reflecting re-migration and a wave of pensioners who like to settle in eastern German regions with rather low price levels translating into higher purchasing power. It is clear that pensioners moving to eastern Germany cannot create the same industrial dynamics as would be the case if skilled workers were moving to eastern German states.

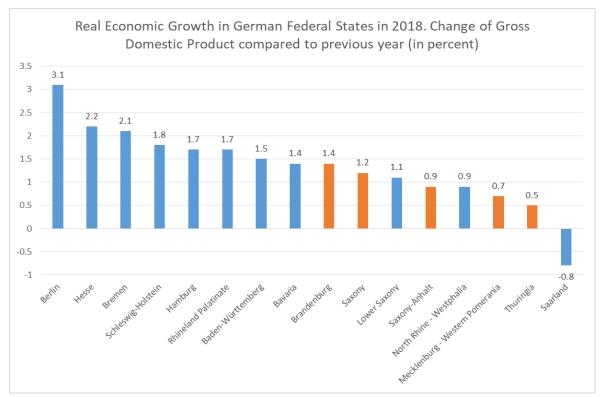


Figure 1: Real Economic Growth in German Federal States in 2018

Source: Statistisches Amt für Hamburg und Schleswig-Holstein (2019), Bruttoinlandsprodukt in Schleswig-Holstein 2018 Wirtschaftswachstum über Bundesdurchschnitt, NR. 47/19 https://www.statistik-nord.de/fileadmin/Dokumente/Presseinformationen/SI19 047.pdf

The AfD is not only strong in poor regions, as is suggested by a study of the German Institute for Economic Research (FRANZ/FRATZSCHER/KRITIKOS, 2019), the party has also achieved electoral success in rather affluent regions and actually in the leading three big Western states, namely Baden-Württemberg (15.1% in state election of 2016), Hesse (13.1% in 2018) and Bavaria (10.2% in 2018), not to mention the 12.6% voting share in the national election of 2017 and a strong 11% in the European election in 2019. The AfD is much stronger than the liberal FDP party which is not only visible in the much smaller voting share of the FDP, but also in the fact that the FDP has not achieved the critical minimum 5% threshold in many states that is necessary to get seats in regional assemblies. It should be noted that the AfD was only achieving slightly below 5% support in national opinion polls in spring 2015 so that the above finding of

FRANZ/FRATZSCHER/KRITIKOS (2019) may be interpreted in a somewhat different way: After Chancellor Merkel decided to open Germany's borders in early September 2015, people in poor east German regions – with declining population figures – to a large extent became quite worried that a high number of refugees would imply cuts in government's current and future support for disadvantaged regions; and that refugees and immigrants might be relocated to regions with negative demographic dynamics which are often found in the former German Democratic Republic. Those people with such fears in eastern Germany's poor regions then turned to the AfD in national, regional and European elections after 2015.

With the AfD standing for an average of about 11% of votes in the average region of Germany and in the national parliament in 2019, it is clear that the old power equation of two rather centrist parties creating a winning coalition for forming government is no longer working; particularly as the SPD's opinion poll results for national elections have hovered in 2018/19 between only 15% and 20%. This makes government more complicated and to the extent that the mainstream parties do not adopt adequate policy innovations, implement useful infrastructure projects and successfully undertake pension reform, there is considerable further room for the AfD to expand.

Germany's grand coalition has not delivered on promised reforms which would partly have helped to limit the AfD's success in eastern Germany. The promised relocation of government institutions – bringing new jobs and high incomes to the host regions – to eastern Germany was also not implemented. The important project of a minimum pension is a project emphasized in the agreement document between the parties of the grand coalition and is considered as particularly crucial for the eastern German states; however, the coalition has been unable to deliver in this policy field. The responsible minister, Hubertus Heil, had no realistic and defensible position when in early to 2019 he tried to enlarge the potential group of pensioners who should be entitled to get such a minimum pension – when the CDU blocked this move (which would have significantly raised the burden on taxpayers from such a pension reform) the proposed reform was postponed in its entirety. Timing and realism are not strong traits of Minister Heil.

To the extent that slow growth nurtures populist parties, it is clear that lack of growth-enhancing national policy initiatives in favor of eastern Germany plus North-Rhine Westphalia and the Saarland are part and parcel of the expansion of the AfD. Inadequate economic policy is found at both the national and the regional level. Poor regions facing declining employment and population often find themselves with much thinner train and bus links than before – the urgent requests of city mayors to maintain adequate public transportation links go unheard. In the internet age, the reaction of the disappointed and frustrated population is not just to wait and see, but instead digital protest networks become more visible and later the AfD picks up an increased voter share at the next local, regional and national elections.

## 3. Regional Economic Disparities

As regards regional inequality in Germany, one may point out that eastern Germany's regions have caught up vis-à-vis western Germany and income differentials of households (focus is on disposable income) between cities and regions in the country side have declined in eastern Germany, while western Germany partly shows different dynamics (FUEST/IMMEL, 2019). In western Germany, regional income differences (not corrected for differences in regional price levels) have increased, particularly in the more rural regions. Such economic diversion is even stronger in eastern Germany for whose regions demography also plays a negative role as the median age in rural regions has strongly increased; at the same, time young people have often moved out of such regions – the population density has decreased by about 1/3<sup>rd</sup> between 1994 and 2016.

Part of the east-west income gap in Germany – and also economic differences between cities and regions in the countryside - obviously reflect the role of hidden champions, that is small and medium-sized world market leaders which in western Germany are often found outside big cities. Eastern Germany suffers from a much lower density of hidden champions in both cities and the rural regions (BUNDESINSTITUT FÜR BAU-, STADT-UND RAUMFORSCHUNG, 2019). It is, of course, not easy to create more hidden champions in eastern Germany, but more R&D promotion by government and creation of new universities in certain regions could help to create a regional eco-system that could help to develop more hidden champions over time.

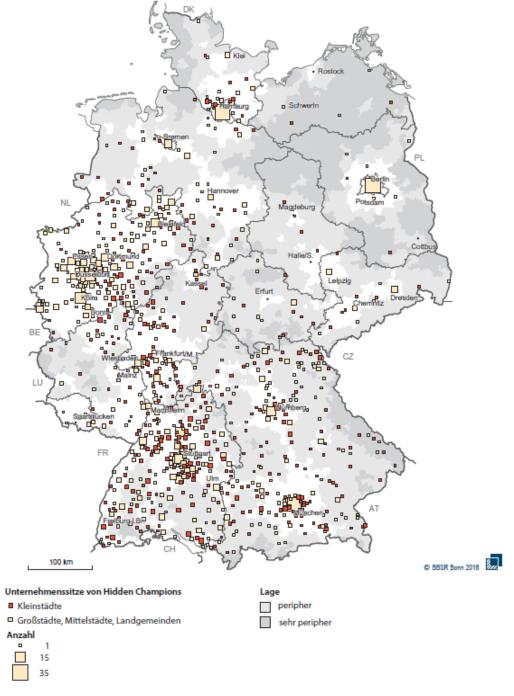


Figure 2: Geographical Distribution of Hidden Champions in Germany

Source: BBSR (2018), KAUM BEACHTET, GEMEINSAM STARK - Versteckte Potenziale von Kleinstädten mit Hidden Champions, p. 42

Taking into account regional price level differences, the east-west income gap in Germany is smaller than nominal figures suggest since the price level in eastern Germany is at least about 5 points lower than in western Germany (see APPENDIX). From this perspective the gross wage gap between eastern Germany and western Germany was only about 14% in 2018. Since 99% of Germany's top 100 multinational companies have their headquarters in western Germany, there are two structural explanations as to why there was still a per capita income gap of about 20% between western and eastern Germany in 2019. The east-west productivity gap cannot be expected to be closed before about 2040. Only with more

productive firms – and hidden champions catching high world market prices for their respective products – could eastern Germany close the wage and productivity gap vis-à-vis western Germany. One may also note that relatively fast growth in Eastern European EU countries should, for geographical reasons, benefit firms in eastern Germany relatively more than firms in western Germany for which transportation costs – affecting trade and foreign direct investment dynamics (read: international production networks) are higher than for firms in western Germany.

Germany's position in the EU venture capital market is rather weak (e.g. in comparison to the UK) and this makes creation of new firms in both eastern Germany and western Germany rather difficult. Several states in Germany have strongly emphasized the creation of more new ICT firms and information & communication technology (ICT) should indeed be an adequate emphasis for the German economy; however, the lack of digital infrastructure investment undermines prospects for higher growth of firms in the ICT sector.

## 4. Weakening Western Policy Consensus in Germany

It has often been said that the Trump administration's policy shift towards no longer lending US support to EU integration and instead supporting the British EU BREXIT movement are two elements which stand for a weakening of the Western world (WELFENS, 2018; 2019a). However, such a weakening is also visible in Germany and the AfD, not surprisingly (being a populist party), is part and parcel of a broader policy shift in the Western world. One cannot argue that the AfD is already a very strong political player in Germany, but in certain regions its voting share of more than 25% give it a crucial position and if established political parties' support among voters should further decline – the SPD here is an obvious weak point with an ongoing decline of voting outcomes for that party over many years – the AfD is likely to further increase its voting shares. One could easily imagine that another refugee wave faced by the EU could reinforce the AfD voting prospects. In September 2019 the Turkish President Erdogan has emphasized that the EU had not transferred the promised funds for refugees in Turkey and that Turkey therefore is considering opening-up its borders in order to allow large numbers of refugees to get to Greece and the EU, respectively. It seems that reduced output growth in Turkey in 2018/19 makes the absorption of Syrian refugees more difficult and this has translated into President Erdogan's move to threaten that Turkey might allow more refugees to move on to Greece.

Part of the AfD clearly emphasizes ethno-nationalist and openly anti-immigration attitudes. In Schleswig Holstein the regional party leader, Mrs. Doris von Sayn-Wittgenstein, was ousted from the party in 2019 via an internal AfD disciplinary process while a majority of AfD members in the northern state were apparently still willing to support her and thus to ignore her contacts (despite her background as a lawyer) to openly radical right-wing groups and even organizations which denied that the Holocaust ever took place. It seems that in both western and eastern Germany the AfD has increasingly attracted former members of very right-wing or even new Nazi parties. One should not overlook that the

expansion of the new right-wing party scenery in Germany and the EU is partly the consequence of the enormous disillusionment of voters with very left-wing parties whose best times seem to be over after the collapse of the Soviet Union and its socialist satellite countries, respectively. A strong Green Party movement which has contributed to opening Germany more for immigration and the combined support of the CDU/SPD/FDP/Greens for more economic globalization has stimulated the expansion of a decisive antiglobalization party, namely the AfD.

It seems that part of the eastern German population is not only afraid that it could suffer from reduced public services as those have to be shared with immigrants and asylum seekers currently in Germany – or anticipated to arrive in the future; but AfD voters also to some extent seem to accept that human rights are not a given in modern society in the early 21st century which – if taken up at a broader scale in Western Europe and the US – could soon bring the end of the West shaped by the Constitution of the United States, the Virginia Constitution of 1776 and the French Revolution of 1789. Part of the AfD is openly linked to the new anti-Islamic Identitarian Movement, originating from France, Italy and Austria, which emphasizes that it is not the individual which is the key focus of policy. Rather the Identitarian Movement argues in favor of ethnopluralism which means that there are different individual peoples in different countries which should not broadly mix with immigrants (and certainly not refugees or immigrants from Islamic countries) in order to maintain the respective identity. Past Islamist terror attacks in Western countries have apparently contributed to the growth of the Identitarian Movement in Europe which also claims that politicians have a hidden agenda to replace the indigenous population in various EU countries with immigrants who have a higher birth rate than the indigenous population so that two thousand years of European culture and tradition would be destroyed in the long run. This is nonsense to the extent that most EU countries have immigration laws and that there is a clear tendency of immigrants from all countries and cultural backgrounds to adjust fertility within a few decades, in Germany for example downwards to the rather low fertility rates of the general population. It is, however, true that the incentives to adjust culturally to the host countries in Europe have been weakened through technology, namely satellite TV and the internet which allows immigrants to remain embedded in their original culture while living in the EU. Stronger emphasis on German language learning in Germany – a trait in policy since about 2014 – has counterbalanced this challenge to some extent.

The AfD movement's cooperation with new and old Nazi elements/neo-fascist groups in eastern Germany and other countries in Western Europe stands for the more radical background of the "Wing" (Flügel) faction in the AfD which is a right-wing ethnic movement with certain radical ideas, with a growing network, and increased funding since about 2016. Bernd Höcke in Thuringia where elections will be held on October 27, 2019, is the leader of that subgroup within the AfD.

Since its start in 2013, when Professor Bernd Lucke from Hamburg - largely as a protest against Merkel's Euro policy - launched with his network the new party, the AfD has experienced a continuous shift to the political right. Several of the early founding-fathers have since left the party. With more and more right-wing politicians, including Bernd Höcke from Thuringia – he himself seeking partial cooperation with the east German anti-immigration and anti-Islamic movement Pegida – and the head of the AfD in Brandenburg, Andreas Kalbitz (he was elected head of the AfD Brandenburg in 2017), the right wing of

the populist AfD has become more influential over time. DER SPIEGEL (2019) has reported about previous right-wing ethnic and Nazi connections of Kalbitz.

Interestingly, several AfD leaders in eastern Germany, including Höcke and Kalbitz, are actually from western Germany. This also holds for the co-speakers of the AfD at the national level, Alexander Gauland and Jörg Meuthen who have tried to position the AfD as a middle of the road conservative party in Germany. With Mr. Gauland, previously an influential CDU member in the state government of Hesse, firmly anchored in both eastern – he was the editor of a newspaper in Potsdam close to Berlin for many years – and western Germany, he is in a key position for translating eastern German AfD support into new expansion impulses in western Germany. To some extent Mrs. Merkel's policy approach to shift the ideological core of the CDU to the center and the left, respectively, has created space on the right wing of the political spectrum; and the AfD has filled this political vacuum. One should also not overlook the fact that the German Parliament in early September 2015 had no broad debate about the opening of its borders for a massive refugee wave, there was consensus among the main parties (CDU/CSU; SPD; GRÜNE; DIE LINKE) in the Deutsche Bundestag that Mrs. Merkel's decision to open Germany's borders was adequate.

Even if one would share this view, the practical implementation of dealing with the influx of more than one million refugees within a year was often chaotic and very poor at the national government level, the level of the states and of many cities which had to deal with administrative matters. Identity verification of refugees (e.g. through taking finger prints and a blood tests) was rarely made and government lost control of the process; authorities often had no idea about the whereabouts of refugees. All this happened in a period when the IS regime had conquered part of Iraq and Syria so that the fear of terrorism was spreading in Europe. The EU in turn had not greatly helped Greece – in the period 2010-2017 was overwhelmed by a massive economic crisis - which had become the first EU country into which every week thousands of refugees came from Turkey (later moving to other countries in the EU). It was only in 2017 that the EU made a deal with Turkey, namely that the Turkish government would get EU funding in exchange for a policy of not letting refugees from Iraq and Syria easily leave Turkey in order to head for Greece. That the refugee wave was handled in a poor way by the federal government in Germany and by certain states - above all Berlin which became a showcase for a chaotic administration unable to deal with the large number of refugees in an orderly way – created an impression of chaos and lack of political control that was clearly counter to the prominent conservative political notion of having an orderly system in Germany. There also emerged a widespread fear amongst poorer strata of society that the large number of refugees would mean a strain on government finance: The poor strata of society in western and eastern Germany – where the share of rather poor people is larger than in western Germany – would suffer from cuts in social security support as the refugee wave implied that government would have to spend an extra € 10 billion per year (0.3% of GDP) for the refugees. It was, however, not considered and also not explained by the Merkel government that after a few transition years, the refugees would be integrated into the German labor market or would create their own businesses so that this long run reaction and adjustment process would leave the net cost of the refugee wave close to zero for Germany in the long run; even under adverse conditions of integrating the refugees in Germany, the cost would be less than 0.1% of gross domestic product.

It is also clear that particularly Mr. Gauland and Mr. Konrad Adam – the latter is a cofounder of the AfD with a background as a journalist (Frankfurter Allgemeine, Die Welt) – have considered fighting the CDU as a no-longer-conservative party, and Mrs. Merkel in particular, as a major motivation to engage in a political battle with the desperate energy of radicals: Merkel's frequent public statement that her policy was 'without any alternative' actually gave the idea of the name of the AfD, the Alternative for Germany. The energy of the convertite means that the largely middle of the road politician such as Alexander Gauland seizes the opportunity to broaden party support; even it comes from groups with a quasi-Nazi orientation which is strong in parts of eastern Germany. As long as it reinforces the AfD voting results, AfD leaders such as Gauland and Meuthen seem to be extremely tolerant with respect to very right-wing political groups and thus over time a strong political radicalization of the AfD could be observed. It is remarkable that the Bertelsmann Foundation, in a study on populist right-wing movements in Europe, has shown that there is a considerable overlap of AfD voters and readers of the Frankfurter Allgemeine newspaper which is generally considered to be conservative quality broadsheet newspaper - with a clear anti-Euro bias in the Economics sections since the start of the Euro in 1999 (Hans-Werner Sinn from the Ifo Institute became a preferred interview partner in the Euro crisis during which he time and again suggested massive losses for Germany - up to 12% of GDP which is roughly 10 times as high as has since been shown to be the case). This suggests that the AfD program indeed is attractive for part of the conservative groups that normally would support the CDU.

In North-Rhine Westphalia, the AfD, in the regional election of 2017, obtained a share of 7.4%, but the next election could bring a doubling of AfD votes if policymakers at the national and the regional level do not adopt adequate policies. In terms of the population, North-Rhine Westphalia is a bit bigger than all the former East German states combined. The conservative-liberal government's policy in North-Rhine Westphalia has contributed to low output growth rates in 2018 and 2019, but the totally unnecessary decision of the grand coalition to bring forward the date for exiting the end of lignite production to 2038 − based on a strange "Coal Commission" (official name: Commission for Growth, Structural Change and Employment) − will undermine growth in parts of eastern Germany but also in North-Rhine Westphalia. The whole energy sector, including lignite production, is covered by the emission certificate trading system of the EU where the CO2 certificate price in summer 2019 was close to € 27 (\$ 30).

The idea of the grand coalition to create a Coal Commission which would unnecessarily fix a specific date for the phasing out of lignite production in Germany in order to reduce CO2 emissions is a self-inflicted problem: Naturally, the AfD exploits the fear of people in the coal regions – four states in Germany – who are afraid of the related future structural change. The German government should simply have relied on the effects of the EU Emission Trading System where the CO2 certificate price, rising strongly in past years, would have pushed for a gradual phasing out lignite production in Germany anyway. By fixing a national exit date of 2038, the grand coalition, following the Coal Commission's proposals, gifted the AfD an easy opportunity to expand its project fear in both eastern and western Germany; and indeed it allows to easily coordinate groups in states which are all facing the 2038 date (Brandenburg, Saxony, Saxony-Anhalt and North-Rhine Westphalia). This simultaneous fixing of a date for the phasing out lignite production in Germany encourages, of course, a simultaneous political resistance in all four states concerned by

this stopping of lignite production – convincing national economic policy should look rather different. The interventionist approach for phasing out lignite is also extremely costly and puts unnecessary adjustment costs of about  $\in$  1500 on the average household in Germany.

# 5. Fears in West Germany and the Former German Democratic Republic

The political psychology among voters differs between east and west in Germany as is shown by a survey organized by the R&V Insurance (R&V VERSICHERUNG, 2019) (since 1992 respondents have been queried about personal, political, economic and ecological fears): In 2019, 39% indicated fears which is much lower than in 2018, but while the share of people concerned had been roughly equal in 2018 in western and eastern Germany, the balance tilted in 2019: In eastern Germany, 47% of respondents indicated concerns about various fears, roughly the same percentage as a year ago (48%), but in west Germany the figure was only 38% which was 8 points lower than the previous year. The top ten fears of Germans are: Fear of government to be unable to cope with the wave of refugees (56%), tensions in the context of immigration (55%), rising international risk through President Trump's policy (55%), political extremism (47%), inability of politicians to adopt reforms (47%), strongly rising rents (45%), serious illness in old age (45%), high cost for taxpayers in the context of Euro crisis (44%), terrorism (44%), rising cost of living (43%). The first two top fears - in the context of the refugee wave and the fear of high immigration - are partly linked to Chancellor Merkel's policy in 2015 and the next two most common fears are also related to government and the political system, respectively. As regards the fear of high costs for the taxpayer in the context of the Euro Crisis, there is another politico-economic fear - which for many years has been driven by alarmist messages/info from the Bavarian Ifo Institute under its then chairman Hans-Werner Sinn whose pessimistic views found a broad echo in most media. A new immigration law adopted in 2019 will help government to better channel immigration in the future. The problem of high numbers of refugees seeking asylum is likely to continue as long as the civil wars in Syria and Libya are not ended. The new transatlantic fears related to US populism are likely to continue, namely to the extent that the US is rather likely to face strong populist political currents for many years to come – even if a more middle-of the road president would be elected sometime soon; Trump might go, but Trumpism will remain an element within the Republican Party and the US for clear reasons (WELFENS, 2019a).

## 6. Climate Policy Issues and the Coal Commission

It was the grand coalition's fear of climate activists and the Green Party's expansion with respect to election results which apparently motivated the CDU/CSU/SPD coalition under Chancellor Merkel to jumpstart the Coal Committee in 2018, whose policy recommendations of spring 2019 are quite inadequate and bring a very high price tag for phasing out lignite mining and the associated coal power generation stations. It effectively phases out less than 100 000 jobs, but creates fear of negative economic developments among millions of people in the four states concerned; and it could raise the voting share of the AfD in Germany by a considerable number of percentage points. Note, the AfD is against the coal mining exit date of 2038. The Coal Commission's policy approach is much more expansive than relying simply on the existing EU Emission Trading System where the rising price of CO2 certificates would help to phase out lignite production in a staggered way over time.

East German regions affected by the expected phasing-out of lignite production showed particularly strong AfD results in the state elections in 2019, according to Forschungsgruppe Wahlen analysis; hence one may anticipate similar developments in the next regional election in North-Rhine Westphalia. At the end of Chancellor Merkel's long time in power, namely 2005-2021, there will be a destabilized political system in Germany shaped strongly by a right-wing populist AfD party – sometimes close to Nazi policy ideas and certainly with a generally strong anti-EU orientation; and much sympathy for Donald Trump and his anti-immigration and anti-climate policy rhetoric which are both echoed by the AfD in Germany.

Professor Meuthen has a strange position in the climate debate because he argues that there is no scientific consensus about a man-made impact on global warming and that the thousands of scientific studies on global warming cannot lead to a firm conclusion about the causes of global warming: Such a conclusion, Meuthen has said on TV, is the "pretension of knowledge" which is an obvious reference to Friedrich von Hayek's scientific approach – the latter, however, is quite doubtful in a period of broad empirical analysis. However, it is also apparent that a considerable number of liberal economists, close to Hayek's ideas, have supported the AfD since its beginning. Alice Weidel, a coleader in the AfD group in the Deutsche Bundestag (Parliament), also represents a mixture of liberal, conservative and xenophobic ideas: With an emphasis on the argument that Germany should become a political system in which referendums would be a frequent element of politics similar to Switzerland where she used to live for many years. That Switzerland has a totally different political tradition and is a rather small country is not really considered by Mrs. Weidel, as is the sobering history of Nazi Germany's practice to use referendums to radicalize policy in an ever more populist way which finally facilitated Hitler's start of World War II.

# 7. Weakening Economic Dynamics and Inconsistent Government Policy

The German economy is facing a cyclical slowdown in 2019/20 and also new structural changes (WELFENS, 2019b) as well as the end of the Merkel government. The latter means that in 2021 the CDU, as the biggest party in the current national grand coalition, will face a difficult transition period to agree on a new *Spitzenkandidat* (leader in the electoral campaign). Given the weak opinion poll results for the current CDU leader Annegret Kramp-Karrenbauer – who is trailing far behind chancellor Merkel and other senior CDU party members – the CDU would face a weaker outcome in the next elections; if the CDU should chose a man as its Spitzenkandidat, voter analysis by the Forschungsgruppe Wahlen suggests that the current CDU bonus among female voters would be gone.

With prospects for a weakened CDU and a generally weakened SPD, the time of the grand coalition will come to the end and more complex coalitions with three or more parties could emerge. This would be a new governance pattern in Germany. At the same time there are prospects for the right-wing AfD to further expand. Post-Merkel, Germany could be considerably less stable than the period 2005-2021. This holds all the more since the German core economic sector, the automotive industry, is facing a structural decline as the shift to e-mobility will require a much lower number of complex intermediate products than the cars using traditional combustion engines with fossil fuels. The automotive industry of Germany in 2019 is already suffering from the BREXIT uncertainties in the UK which takes exports amounting to about 2.5% of GDP. Moreover, Germany's automotive firms are not meeting the fuel efficiency standards set by the EU a few years ago and as of 2020 high fines could be faced by Germany's big car producers. This shows some negligence on the part of the big automotive firms, but almost the same negligence can be found in the government which has curiously accepted obligations for reducing CO2 emissions outside the ETS sector and is going to fail to reach the relevant goals – again, as of 2020 fines will be imposed by the EU on non-performing countries. The art of consistent effective and efficient government has been weakening in Germany for years and the UK, with its crude BREXIT policies under Prime Ministers May and Johnson does not look any better. If one considers government performance in the US, the UK, Germany, France and Italy, one may argue that despite some weaknesses in the context of the so-called "yellow vest" protests in 2018, the biggest winner is France under President Macron. As Italy has switched from a populist government to a more moderate coalition between the Five Stars Movement and the Social Democrats in September 2019 there are modest prospects for a gradual political stabilization of Western Europe.

The eastern German economy suffers particularly from the West's strained political relations with Russia and the embargo measures, respectively. A weak psychological point of the grand coalition in Berlin is to have very few representatives from eastern Germany in government. With zero interest rates expected to continue in the Eurozone, there will be continued dissatisfaction amongst broad strata of society – of households with savings – and thus the limited support of German voters for the ECB will not improve much over time. Germany's fiscal policy stance has been rather adequate in past years, but with

recession looming in 2019, the policy of zero nominal budget deficits is quite doubtful. Instead, there is all the more reason for government to come up with a broad fiscal policy expansion, possibly staggered over several years in order to not only stabilize the economy in a weak cyclical position, but to indeed bring about a broader modernization initiative in a historical period of need for a better climate policy.

## 8. Necessary Economic Policy Reforms

It should be noted, however, that the German government itself has imposed strangely narrow budget limits on government deficits: While the EU requirement is not to exceed 0.5% of GDP, except in clear recession periods, the German government (i.e., grand coalition under Mrs. Merkel) adopted a limit of 0.35% of GDP for general government which is much too low; worse, as this limit was put in the constitution it cannot easily be removed. With an expected structural GDP growth rate of 1.5% in real terms, realizing only 0.35% of GDP as a long run deficit-GDP ratio will bring about a steady state value of the debt-GDP ratio of 23.3% of GDP which is way below the current 59% and even below the current ratio of Switzerland. Thus the grand coalition has a new self-imposed challenge that has to be met in order to have more fiscal policy leeway in a period in which monetary policy should no longer consider further loosening of an already loose monetary policy. The limit of 0.35% of GDP should be changed to a more flexible rule which could be to accept 0.5% of GDP provided that at least 85% of the budget expenditures financed from deficits are for infrastructure investment spending. Setting aside 0.1% of the structural deficit for a joint Eurozone fiscal policy aimed at fighting recessions could also be a useful new element of a reform of the constitution in Germany (again with the rule that spending must be for Eurozone infrastructure investment projects).

With a budget surplus of about € 45 billion in the first half of 2019, the federal government of Germany runs a strangely high budget surplus without any apparent idea of how to spend at least part of the rising revenue in a way that would help to upgrade the rather neglected infrastructure in Germany. There is also the problem that Germany's government thus looks rather passive to its Eurozone partners and the EU respectively, namely in a period in which the Eurozone's economy is about to enter a recession. With a growing population in Germany, there is indeed a second good argument for raising public investment which in turn would help to stimulate private investment and reinforce competition in the EU single market. Enhancing electricity trade, for example, and therefore investing more in cross-country grid links of Germany – which has nine neighboring countries – should be a natural policy element of fiscal policy.

If Germany's grand coalition does not improve, there is a considerable risk that the AfD will expand further. The digital campaign of the AfD is much more modern than that of established parties, the number of AfD Facebook followers is twice as high as those of the CDU and the SPD combined. It seems that in Bavaria at least, the regional government has a strategy to successfully fight the right-wing AfD. The Bavarian Prime Minister Markus Söder has picked up many key policy issues which are reflecting the fears of the population and thus he has an approach which could contain and neutralize the AfD. One

should not overlook that the Merkel government has serious weak points in its economic policy, ranging from an inconsistent climate policy to inadequate timing in its pension reforms. In the new internet age there is a rather fragmented public and more radical voices are active in politics. This makes it more difficult for traditional parties – lacking of a modern digital campaign strategy – to maintain their high voting shares. Thus there is a considerable risk that populist policies will expand in Germany and the whole of Europe as well as in the US. It will be crucial that the grand coalition improves its policy, and that the EU under the new Commission – headed by Mrs. von der Leyen - adopts a convincing EU reform.

There are at least two critical challenges for the German economic system where a medium-term decline of the automotive industry is likely and where households could face a decade of zero interest rates on bank deposits which will cause considerable frustration. The accelerated structural change in Germany will require that government spends more on retraining – with 0.5% of GDP, Denmark seems to be a good benchmark, namely a ratio twice as high as the German figure in the decade after 2008. The second problem concerns high German structural current account surpluses over many years.

HÜNNECKES/SCHULARICK/TREBESCH (2019) have shown that German capital exports earn surprisingly modest rates of return and represent a strong home bias – broadly defined as German investors having a strong preference not to invest much in developing countries but rather in northern EU countries and the US. If Germany would have had the same rate of return on foreign investment as Canada for international investments in the decade after 2008 the rate of return effects would have amounted to an additional € 3 trillion or € 37 000 per capita (one may raise some doubts about the full relevance of this figure since tax avoidance could explain part of the strangely low yield performance from investment abroad). This suggests that the strong traditional position of Germany in manufacturing seems to go along with a rather weak performance of the German banking sector which might include both private banks and the savings banks plus cooperative banks whose ability to find attractive investment projects abroad with high yields is quite modest.

This in turn – here the hypothesis of the above authors seems to be convincing – could largely be explained by a big gap in top universities specializing in Financial Economics; with the exceptions of the University of Frankfurt and the University of Ulm, such specialization hardly exists and until the BREXIT referendum there were also no prospects to attract a critical number of experts from abroad and the UK in particular.

With BREXIT, prospects have improved here. However, it still holds that there is a university specialization gap in Germany. The federal government could cope with this by adding a new pillar to its current excellence initiative where government itself decides about the promotion of several new core competence universities or faculties with an adequate specialization in Financial Economics/Banking Business. Without such reforms, the beginning de-industrialization of Germany in the form of a shrinking automotive industry will not be matched with enough new services expansion opportunities and Germany's capital exports would also continue to face strangely low yields of return. If such reforms had allowed Germany to achieve 80% of Canada's yields in international investments in the decade after 2008, an additional €2.4 trillion in investment remuneration from abroad would have been obtained by German investors. Thus, assuming an effective tax rate of 10%, € 24 billion in additional tax revenues could have been obtained annually

which would have allowed the government to increase the amount of money spent on Germany's university system by 50% annually if just half of the extra government revenue had been spent on upgrading Germany's university system and to particularly provide funding for new Financial Economics departments or for new universities with a broad specialization in this field. Creating two new universities in eastern Germany could part of such a broader increase in the national higher education budget. There would still be  $\in$  12 billion as additional tax revenues which to some extent could be used to provide better, faster internet services and other infrastructure upgrading.

## References

- BUNDESINSTITUT FÜR BAU-, STADT- UND RAUMFORSCHUNG (2009), Regionaler Preisindex, Kawka, R., Bonn.
- BUNDESINSTITUT FÜR BAU-, STADT- UND RAUMFORSCHUNG (2018), KAUM BEACHTET, GEMEINSAM STARK Versteckte Potenziale von Kleinstädten mit Hidden Champions, Vonnahme, L.; Graflenberger, M.; Görmar, F.; Lang, T., ifl Leipzig, im Rahmen des Projektes Hidden Champions Stabilisierungs- und Entwicklungsfaktoren von Kleinstädten in peripheren Lagen
- DER SPIEGEL (2019), AfD: Der völkische »Flügel« übernimmt die Macht in der Partei, Nr. 37, 07.09.2019
- FRANZ, C.; FRATZSCHER, M.; KRITIKOS, A. (2018), German Right-Wing Party AfD Finds More Support in Rural Areas with Aging Populations, *DIW Weekly Report* 7/8 / 2018, p. 69-79
- FUEST, C.; IMMEL, L. (2019), Ein zunehmend gespaltenes Land? Regionale Einkommensunterschiede und die Entwicklung des Gefälles zwischen Stadt und Land sowie West- und Ostdeutschland, *ifo Schnelldient*, 16/2019, 22 August 2019
- FORSCHUNGSGRUPPE WAHLEN (2019), Unions-Verluste, SPD-Einbruch, Grüne stark wie nie Politik in Europa erstmals wichtiger als Bundespolitik, Europawahl 26 May 2019, Kurzanalyse, Forschungsgruppe Wahlen e.V., Mannheim <a href="https://www.forschungsgruppe.de/Wahlen/Wahlanalysen/Newsl\_Euro190527.pdf">https://www.forschungsgruppe.de/Wahlen/Wahlanalysen/Newsl\_Euro190527.pdf</a>
- HENNICKE, P.; WELFENS, P.J.J. (2012), Energiewende nach Fukushima Deutscher Sonderweg oder weltweites Vorbild?, Munich: oekom verlag
- HÜNNECKES, F.; SCHULARICK, M.; TREBESCH, C. (2019), Exportweltmeister: The low returns on Germany's capital exports, *Kiel Working Paper* No. 2133, Kiel Institute for the World Economy (IfW), Kiel
- MEUTHEN, J. (2019), Meuthen Im Gespräch "Wir brauchen eine starke Fraktion", *Junge Freiheit*, 22/19, 24 Mai 2019, S. 3
- R&V VERSICHERUNG (2019), Ängste der Deutschen 2019, <a href="https://www.ruv.de/presse/aengste-der-deutschen/downloads">https://www.ruv.de/presse/aengste-der-deutschen/downloads</a>, last accessed on, September 10, 2019.
- WELFENS, P.J.J. (2018), An Accidental BREXIT, London: Palgrave Macmillan
- WELFENS, P.J.J. (2019a), The Global Trump. Structural US Populism and Economic Conflicts with Europe and Asia, London: Palgrave Macmillan.
- WELFENS, P.J.J. (2019b), EU-Strukturwandel, Leitmärkte und Techno-Globalisierung, Oldenbourg: De Gruyter.

## **Appendix**

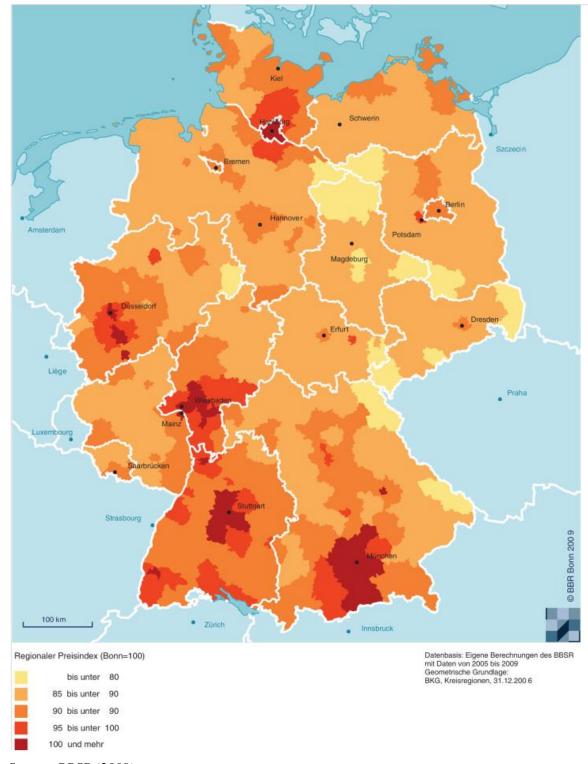


Figure 3: Regionaler Preisindex nach Berechnungen des BBSR (2009)

Source: BBSR (2009)

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