

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Schnabl, Gunther

Working Paper

70 years after the German currency and economic reform: The monetary, economic and political order in Europe is disturbed

Working Paper, No. 156

Provided in Cooperation with:

University of Leipzig, Faculty of Economics and Management Science

Suggested Citation: Schnabl, Gunther (2018): 70 years after the German currency and economic reform: The monetary, economic and political order in Europe is disturbed, Working Paper, No. 156, Universität Leipzig, Wirtschaftswissenschaftliche Fakultät, Leipzig

This Version is available at: https://hdl.handle.net/10419/187925

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Wirtschaftswissenschaftliche Fakultät Faculty of Economics and Management Science

Working Paper, No. 156

Gunther Schnabl

70 Years after the German Currency and Economic Reform: The Monetary, Economic and Political Order in Europe is Disturbed

Oktober 2018

ISSN 1437-9384

70 Years after the German Currency and Economic Reform: The Monetary, Economic and Political Order in Europe is Disturbed

21.10.2018

Gunther Schnabl University of Leipzig Institute for Economic Policy Grimmaische Straße 12 04159 Leipzig schnabl@wifa.uni-leipzig.de

Summary

The currency reform on 20 June 1948, together with a comprehensive liberalisation of prices and the implementation of monopoly control, formed the basis for the West German economic miracle. From then on, the market principles formulated by Walter Eucken und implemented by Ludwig Erhard became the economic backbone of the European integration process. 70 years later, little remains of the basic principles of the German social market economy. An increasingly expansive monetary policy of the European Central Bank undermines market principles, growth and social cohesion in Europe, thereby eroding political stability. To ensure Europe's economic, political and social stability, a return to a stable currency and a market-oriented order is needed

Key words: Currency and economic reform, economic order, Ludwig Erhard, Walter Eucken, European integration, democracy, inequality, social market economy.

JEL-Key: B200, E140, B250

1. Introduction

In March 2018, the German Federal Minister for Economic Affairs and Energy Peter Altmaier (2018) announced in the German parliament a renaissance of the social market economy. He claimed to make again the social market economy a successful "export good made in Germany". This initiative comes in a time where the German economy seems to do well. Exports flourish and umemployment has declined to the lowest level since the German reunification (from 11.7% in 2005 to 5.3% in 2018).

65% of the German population still believe that the social market economy is the best economic order for Germany (Statista 2018). 73%, however, also think that the German economy does no longer work as it used to. 42% of respondents believe that the social market economy is responsible for injustice in Germany. 70 years after the German currency and economic reform, which built the basis for an impressive economic growth performance, discontent and political polarisation are growing all over Europe.

In the literature, there was a controversy about the role of the 1948 currency and economic reform for the German economic miracle. Jánossy (1966) and Abelshauser (1975) argued that the high growth in post-war Germany was largely due to reconstruction. Erhard (1957), in contrast, saw the currency reform and the subsequent release of prices as the main pillars of Germany's economic recovery. Econometric analysis by Ritschl (1985) provided empirical evidence against the reconstruction hypothesis.

Recent literature deals little with the role of basic market principles for current economic developments. Ordoliberal thinking in the sense of Eucken (1952) and Erhard (1957) is widely seen as typically German, model-averse stone age economics (Adam et al. 2009), whose findings are irrelevant for growth, prosperity and distribution. The wealth of the German people is regarded as being at its historial peak. Similar to other countries increasing political polarization is attributed to growing inequality due to globalization (Rodrik 2018) or to uncertainty because of rapidly growing cultural and ethnic heterogeneity (Hobolt and De Fries 2016).

Müller and Schnabl (2018) argue that Walter Eucken's (1952) constitutive principles, which Ludwig Erhard implemented in important parts of the German economy, were decisive both for the German economic miracle and the success of the European integration process. As the

monetary policy of the European Central Bank undermines those basic principles, the economic basis for the European integration process is argued to fade away. Therefore, in the following, the role of the German monetary order for growth and social cohesion in Europe is analysed.

2. Germany's 1948 Currency and Economic Reform

The currency reform in the three western occupation zones of Germany on 20 June 1948 formed the basis for the social market economy (Buchheim 1998). Since the mid-1930s, monopolisation, state command economy, price controls and the allocation of goods had determined the living conditions of Germans. The turnaround was due to the fortunate coincidence of three factors. Firstly, the US occupying forces under General Lucius Clay believed in market principles and pushed toward the resolution of cartels (Ritschl 2016). Secondly, Walter Eucken (1952) and Franz Böhm (1950) had developed the academic foundations for a liberal economic and legal system. Thirdly, in 1947, Ludwig Erhard, an advocate of a liberal economic order, had taken over the leadership of the Special Office for Money and Credit (Sonderstelle Geld und Kredit), which was preparing the currency reform.

The reform was initated by the US Congress, which aimed to reduce the economic burden from the starving German population. The first step was to eliminate the overhang of money that had been created by financing the war by printing fiat money. As money was in excessive supply, it disturbed the effecient use of resources. Most goods were rationed and only available on a certificate of entitlement, which limited production. Furthermore, the overhang of money undermined the acceptance of the Reichsmark as a means of payment and store of value. A rapid economic recovery was to be expected, as the industrial plants had survived the war largely without serious damage (Ritschl 2005).

The *Bank deutscher Länder* was founded in March 1948 as the predecessor of Deutsche Bundesbank (Buchheim 1998). The new Deutsche Mark (DM) banknotes were printed in the USA and transported to Frankfurt am Main in 23,000 wooden crates under strict secrecy. On 20 June 1948, the population received DM 40 per capita. Companies and tradesmen received DM 60 per employee. Cash and bank deposits were exchanged at a ratio of 100 Reichsmark to 6.5 DM. Debt at a ratio of 100:10. Wages, prices and rents were converted 1:1. Thus the owners

of physical assets such as goods, companies and real estate gained; the savers lost. A recompensation scheme (Lastenausgleich)¹ compensated partially.

After drastic hardships of the pre-war, war and post-war periods, the currency reform became one of the "most striking positive collective experiences of the Germans". While on 19 June 1948 many shops were still closed, allegedly due to being sold out or due to illness, from 20 June the shelves suddenly filled. The high demand quickly caused production to rise to pre-war levels (Erhard 1958, 13-15). Based on the "Law Governing the Principles of Planning and Price Policy after the Currency Reform" of 24 June 1948, prices were successively released. Wage freezes were lifted.

The large enterprises pushed for price controls and restrictions to market access. Erhard (1958: 101) vehemently opposed them: "Any fragmentation of the national economy into vested interests cannot therefore be allowed." Erhard (1958: 136) regarded it as risky if entrepreneurs moved from personal responsibility to the socialization of risks. He saw cartels as detrimental for those enterprises, which are not able to build cartells, i.e. the small and medium enterprises (Erhard 1958: 137-138). Cartells would ultimately have to be paid by people with a lower standard of living. In 1958, the Law Against Restraints on Competition (Gesetz gegen Wettbewerbsbeschränkungen) came into force, which prohibited cartels and subjected mergers to the approval of the cartel office.⁵

Eucken's (1952) eight constitutive principles of a market economy were implemented in large parts of the economy:⁶

¹ For details see Hughes (1999).

² The quote is attributed to Ludwig Erhard. Ritschl (2005) argues that the transformation of the economic order was less pronounced as suggested by Erhard (1958). Important characteristics of the the pre-war and war economic system prevailed.

³ Erhard (1958: 13) cites Jacques Rueff and André Piettre as follows: "The black market suddenly disappeared. Shop windows were full of goods; factory chimneys were smoking; and the streets swarmed with lorries. Everywhere the noise of the new buildings going up replaced the deathly silence of the ruins. If the state of recovery was a surprise, its swiftness was even more so. In all sectors of economic life it began as the clocks struck on the day of currency reform."

⁴ Gesetz über Leitsätze für die Bewirtschaftung und Preispolitik nach der Geldreform.

The law against restraints of competition did not correspond to the pure form of complete competition, because it allowed, for example, rationalisation cartels Rhonheimer (2017: 96-97).

Rhonheimer (2017: 89-94) points out that the concept of competition of Eucken (1952) and Erhard (1958) was different. Eucken (1952) and also Böhm (1950) saw the ideal in many small comapnies with equal starting positions, with entrepreneurs running their own companies. Erhard, on the other hand, as a practitioner, realised that this theoretical concept was unrealistic and uneconomic. He regarded the coexistence of large, medium-sized and small companies as ideal.

(1) The **primacy of monetary policy** was applied: "All efforts to make a competitive order a reality are pointless unless a certain level of monetary stability can be ensured. Monetary policy thus has primacy for the competitive order." (Eucken 1952: 256). The Deutsche Mark issued by the independent Deutsche Bundesbank formed a stable backbone for the economy. (2) The stable currency in combination with **free prices** ensured that prices provided reliable information about the scarcity of goods and consumer preferences. Therefore, the production structure was able to adapt to demand. Erhard (1958: 28) placed the consumer at the centre of his economic policy: "The customer became king again; a buyers' market began!". (3) The **markets were open**. New companies could enter at any time, non-profitable companies had to leave the market. Monopoly supervision prevented excessive market power. Consumers benefitted from competition in the form of lower prices and thereby higher real wages.

(4) In contrast to Soviet-occupied East Germany, **private ownership** of means of production was predominant, which was an important prerequisite for an efficient allocation of resources. Only those who can privatize the profits will strive for the greatest possible efficiency. (5) Due to **freedom of contract** – excluding for contracts that would build monopolistic power –, everyone was free to organise his economic activities according to his strengths.

(6) The **liability principle** guaranteed that profits could be retained, but also that losses had to be borne by the individual. Only if people can be made liable for their actions – so the assumption – will they also act economically responsibly. (7) According to Eucken's principle that **economic policy should be constant and forward-looking**, Erhard was very cautious with state interventions and defended the market principles against interest rate groups. (8) Thus – as demanded by Eucken (1952) in his eighth principle – **all seven principles were jointly fulfilled** in broad areas of the West German economy.

Even though sectors such as banking, insurance, transport and many public monopolies remained excluded from free competition (Rhonheimer 2017), the free market economy could unfold its potential in an impressive way. Figure 1 shows the real growth rates of the Federal Republic of Germany since 1950, which between 1950 and 1990 refer to West Germany and

"With the currency reform, the veil which had made all calculation impossible had been torn off the economy; behind lay pseudo-employment." Erhard (1958: 88)

⁸ "The yardstick and criterion of what is good or bad in economic policy are not dogmas or the points of view of pressure groups, but exclusively the human being, the consumer, the people. Economic policy can only be regarded as good if and as long as it is regarded simply as useful and welcomed by the individual." (Erhard 1958: 100-101)

then to unified Germany. While the economy was still idle in 1948, growth accelerated rapidly. Machinery ran smoothly, wages rose faster than prices and unemployment fell steadily. While 1.3 million unemployed were registered in 1949 (Erhard 1958: 90), full employment was reached in 1962 by the latest with 0.7% unemployment (Fig. 2).

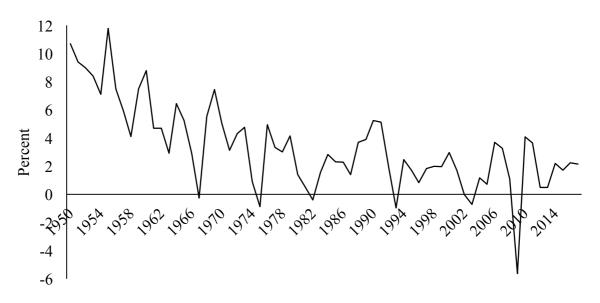


Figure 1: Real Growth in Germany 1950-2017

Source: Germany, Statistisches Bundesamt. From 1950 to 1990 West Germany, since 1991 unified Germany.

Germany was surprised by an economic miracle that stood in fundamental contrast to the economically and politically fragile of the interwar period. Erhard, who was minister of economic affairs from 1949 to 1963 and Chancellor from 1963 to 1966, symbolized the new prosperity with his thick cigars. His book "*Prosperity through Competition*" (1958) makes aware of the fact that the market economy was anything but a self-runner and had to be constantly defended: "*The danger of limitation of competition threatens constantly from many sides. One of the most important tasks [...] is, therefore to secure free competition.*" (Erhard 1958: 2).

The programmes of the political parties only slowly adapted to the economic successes of the currency and economic reform. The Ahlen programme of the Christian Democratic Union (CDU) of 1947, which aimed at overcoming capitalism and socialism, still had many elements also found in the East German socialist planning economy. The CDU turned to the social market economy in the Düsseldorf Guidelines (Düsseldorfer Leitsätze) in 1949, which were written under the strong influence of Ludwig Erhard. The CDU combined the principles of

Ordoliberalism⁹ represented by Eucken (1952) with the christian social doctrine, which places normative values above the self-interest of individuals and social groups (Blank 1967).

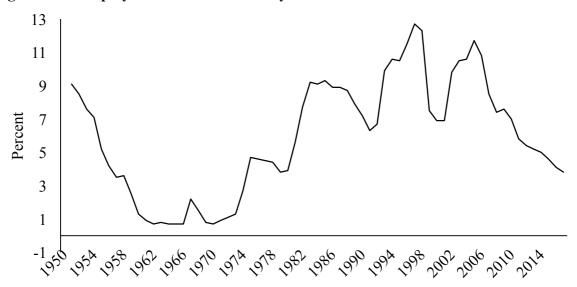


Figure 2: Unemployment Rate in Germany 1950-2017

Source: Germany, Statistisches Bundesamt. From 1950 to 1990 West Germany, since 1991 unified Germany.

The Social Democratic Party (SPD) initially opposed the reforms. "It is wrong to throw the sick man into cold water and expect him to swim," raved SPD politician Kreyßig. In 1950, his party unsuccessfully filed a motion to remove Erhard from his office. Erhard (1958: 2) had countered that "prosperity for all" and "prosperity through competition" belonged inseparably together. The first postulate marked the goal, the second the path leading to the goal. It was not until 1959 that the SPD admitted its support for the social market economy in the Godesberg Programme under the slogan "competition as far as possible, planning as much as necessary". The German people followed Erhard and helped the CDU to an absolute majority in the 1957 election.

The fathers of the market economy must have realised that a pure market economy would have been politically difficult to defend without promising social balance. Both the CDU and the SPD had added to the market economy the attribute "social" to make it politically digestible.

7

Ordoliberalism is a concept for a market economy. The state creates a regulatory framework for free economic action. The resulting competition generates prosperity. Undesirable developments such as high inequality and environmental pollution are corrected by the state. See also the constitutive and regulative principles of Eucken (1952) (Chapter 2). Important representatives of Ordoliberalism are Walter Eucken, Franz Böhm and Leonard Miksch.

¹⁰ Paraphrased by Erhard (1958: 85).

Eucken (1952) had formulated four regulative principles in addition to the eight constitutive principles: Monopoly control, the control of excesses on the labour markets (such as wages below the subsistence minimum), the internalisation of negative external effects (such as environmental pollution) and redistribution in favour of very low incomes through a progressive tax system.

Müller-Armack (1947) had proposed to combine the principle of freedom on the market with that of social balance under the term "Social Market Economy". He saw three levels of sociality: First, the social consequences of the market itself, since the market educates people to be reliabile and aligns production with the preferences of consumers. Secondly, the regulatory policy that prevents monopolies and secures monetary stability. Thirdly, redistribution should ensure the acceptance of the new order. Social equality was enshrined in the Basic Law of the Federal Republic of Germany of 1949. Art. 20, paragraph 1 states: "The Federal Republic of Germany is a democratic and social federal state."

3. Implications for the European Integration Process

The great success of the reforms – real growth in Germany in the 1950s averaged 8% per year – spread to the whole of Europe. Through the European Coal and Steel Community (1951), France aimed to control the reviving West German economy through a "High Authority". In the negotiations of the European Economic Community (from 1958), France could achieve common European institutions (institutional integration), which provided a formal institutional framework for redistribution from the north to the south. For its part, Germany promoted in the spirit of ordoliberalism the freedom for the flows of goods, services, labour and capital in the common market (functional integration):¹³

"The integration of Europe is more necessary than ever, it has become almost overdue. But the best kind of integration which I can imagine does not depend on the establishment of new offices and administrative procedures or a growing bureaucracy; it depends in the first instance on the reconstruction of a free international order, as best and most completely expressed in a free convertibility

The German hyperinflation of the 1920s had highlighted the unfair distributional effects of inflation. It eroded the middle class, which contributed to increasing political instability.

¹¹ See also Müller-Armack (1956), 390.

The distinction between functional and institutional integration dates back to Balassa (1961). The distinguishing feature is the different degree of willingness to renounce economic sovereignty. Both areas of integration are interconnected because the integration of markets necessitates the establishment of institutions that regulate the process of integration.

of the currency. Convertibility of the currency, of course, includes complete freedom of movement of goods, services and capital. "(Erhard 1958: 211)

While the common institutions formed the political basis for supranational decision-making in Europe, Germany's liberal order became the economic basis for the European integration process. The European integration was thus in mutual interest (Müller and Schnabl 2018): the opening of European markets enabled Germany's industry to benefit from economies of scale in industrial production and additional productivity gains, which boosted the tax revenues of the German government. The Southern and Western European partner countries, whose growth models were based on central bank-financed government spending (De Grauwe 2012: 151) and thus exhibited less robust growth dynamics, benefitted from growing import demand from Germany.

As the monetary policies of the Southern and Western European countries were expansionary in comparison to Germany, they could import parts of the German growth momentum via the devaluation of their currencies (beggar-thy-neighbor). This was possible because the Deutsche Bundesbank, which was geared to the primacy of monetary stability, did not devalue the Deutsche Mark in response to the devaluations of the other European currencies. The credible committment of the Deutsche Bundesbank to the stable currency thus prevented the destructive devaluation race that had begun in the 1930s after the successive dissolution of the gold parities (Kindleberger 1973).

Fig. 3 illustrates the significant devaluations of the French franc and the Italian lira against the DM in comparison with the stable Dutch guilder. This constituted a persistent competitive disadvantage for the German export industry, as the southern and western European currencies continued to be depreciated. However, this created a pressure to increase efficiency. Over time, technological progress and productivity gains were promoted, which formed the backbone for large prosperity gains in post-war Europe.

In Germany, the high productivity gains went hand in hand with a rapidly rising real wage level and allowed for the generous expansion of the social security system. High tax revenues also enabled growing financial contributions to the European Community. The common agricultural policy and European regional policy created platforms for redistribution from north to south. The size of these funds grew with the accession of further southern European states such as Greece, Spain and Portugal. Germany's net transfers of wealth created a positive climate for

removing barriers to trade, services, capital and labour movements, which boosted economies of scale in Germany and whole Europe. Germany's net payments to the European institutions in 2017 amounted to around 14 billion euros, a volume similar to that of the domestic German regional equalisation system (Länderfinanzausgleich) (15.6 billion euros in 2016).

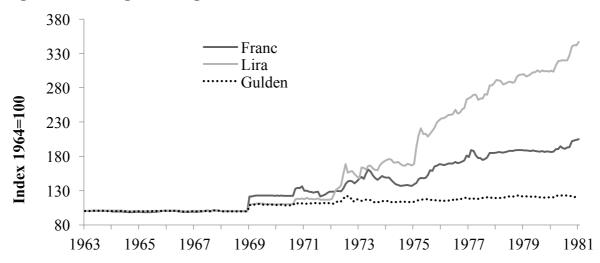


Figure 3: Exchange Rates against the Deutsche Mark

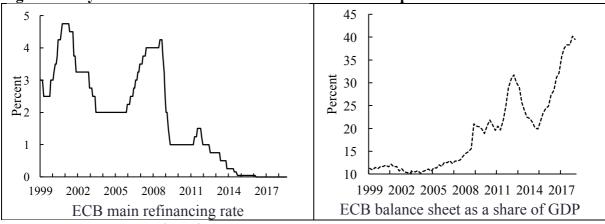
Source: IMF. Rising lines represent devaluations of the respective currencies.

For a long time, the stability orientation of the Deutsche Bundesbank set limits to both the German welfare state and redistribution to other European countries. If tax revenues and the scope for borrowing were no longer sufficient to meet expenditure commitments, reforms were necessary because the Deutsche Bundesbank refused financing of government expenditure via the money press. With the generous German welfare system and the high wage level being widely transferred to East Germany in the course of the German unification, the German welfare state reached its limits. By 1994, national debt had grown close to the Maastricht threshold of 60% of GDP, unemployment had risen to a record 13% (Fig. 2).

After the turn of the millennium, the Schröder government tightened government spending and restructured the social security systems under the slogan "Hartz IV" (Burda and Seele 2016). Wage increases and expenditure in the public sector were strongly limited. The liberalization of the labor market led to wage restraints in the private sector. The flexibilisation of the labor market and the restructuring of the social security systems created the potential for new prosperity gains as represented by a persistent decline of unemployment as shown in Fig. 2.

At this time, however, a fundamental turnaround for the European economic order was already on the horizon, triggered by the reorientation of European monetary policy. Following the bursting of the dotcom bubble (2000), the ECB stabilized the European economy – in particular low-growth Germany, France and Italy – with sharp interest rate cuts. As the Hartz reforms in Germany paralysed growth and curtailed credit demand (both in the German private and public sector), large parts of the created liquidity were transported to the south of the euro zone (and beyond). There, the capital inflows financed exuberance reflected in high current account deficits (Jaumotte and Sodsriwiboon 2010). The capital inflows and the historically low level of interest rates created, starting from 2003, favorable conditions for excessive credit growth, real estate and equity bubbles, euphoric wage increases and unsustainable hikes in government spending.¹⁴

Figure 4: Key Interest Rate and Balance Sheet of the European Central Bank



Source: European Central Bank.

When in the year 2007 capital inflows from the north dryed out, the European financial and debt crisis was triggered, which forced on the European Central Bank an even more expansive monetary policy. The European Central Bank (ECB) had been created after the blueprint of Deutsche Bundesbank as independent (Art. 130 TFEU) being primarily committed to price stability (Art. 127 TFEU). Yet, the principles enshrined in the European treaties were from then onwards called into question. The ECB lowered interest rates to zero, from March 2015 the ECB bought corporate and government bonds worth 2,600 billion euros (see Fig. 4). Therefore,

_

¹⁴ As a result, the productivity gains generated by the Hartz reforms were consumed abroad.

monetary policy became increasingly regarded as aiming at public financing (Sinn 2018), ¹⁵ as it was the case in southern European countries before the introduction of the euro. ¹⁶

In response to the hike in risk premia on Southern European government bonds, ECB President Mario Draghi announced in July 2012 that he would do everything to prevent the euro from collapsing. He thus gave an implicit guarantee declaration for all highly-indebted euro states and questioned the no bail-out clause (Art. 125 TFEU), which was intended to exclude the liability of the European Union and all member states for the debt of individual member states. The purchases of government bonds by the ECB amounting to 2,000 billion euros can be seen to be in the contradiction to the ban on the financing of government expenditure by the central bank (Art. 123 TFEU). As the ECB eliminated rapidly rising risk premiums on the debt of the southern euro states, the pressure to consolidate unsustainable government spending was significantly eased in all member states of the European monetary union. 18

Moreover, since 2010 Deutsche Bundesbank has accumulated assets within the Eurosystems' TARGET2 payments system at the European Central Bank amounting to almost 1.000 billion euros. The claims of Deutsche Bundesbank and some other northern European countries are matched by growing liabilities of southern euro countries such as Italy, Spain, Portugal and France (Sinn and Wollmershäuser 2012). Since TARGET2 loans are non-refundable and non-interest bearing, they can be regarded as transfers for other euro countries (Sinn 2018). For companies, banks and governments in the countries with TARGET2 liabilities the incentive to restructure has de facto been reduced.

Meanwhile, in Germany, the very loose monetary policy of the European Central Bank is driving new unsustainable developments (Schnabl 2018). The interest rate set by the ECB is feeding real estate bubbles in the economic centres. The low level of interest rates – combined with a still relatively restrictive fiscal policy (i.e. a balanced budget dubbed "black zero") – favours capital outflows that finance the large current account surpluses. The expansion of

This became possible because since the mid-1980s increasingly expansive monetary policies in the industrialized countries have not been reflected in rising prices for goods and services but in rising asset prices (Schnabl 2018).

De Grauwe (2012: 151) distinguishes for the period prior to the euro introduction between the German central bank model, which refused to finance government expenditure, and the Anglo-French central bank model, which participated in the financing government expenditure, thereby keeping inflation high.

The counter position is that the bond purchases of the ECB are not equivalent to government financing as long as the bonds are bought from secondary markets and not directly from governments. See Reuters October 4th 2018.

The European Central Bank buys the bonds of all euro countries except Greece according to the capital key.

Deutsche Bundesbank's TARGET2 assets can also be seen as export financing, as otherwise import demand from other euro area countries would substantially decline. The real estate and export bubbles are currently inflating tax revenues and are reducing the cost for the unemployment insurance, which – similar to the southern European states before the outbreak of the crisis – allows for a significant increase in German government spending.

4. Implications for the Social Market Economy and Political Stability in Europe

Whereas in 1948 the removal of the monetary overhang and the introduction of stable money formed the backbone of the German economic miracle, today the increasingly loose monetary policy of the European Central Bank is undermining Eucken's (1952) constitutive principles of the social market economy (Freytag and Schnabl 2017).

- (1) Monetary policy is no longer stability-oriented because the growing monetary overhang is driving up asset prices (instead of consumer prices). Both the real estate bubbles in South, East and West Europe (2003-2007) and the current steep rise in real estate and stock prices in Germany must be seen as a consequence of too low interest rates set by the European Central Bank (Schnabl 2018). The crises resulting from the bursting bubbles in Southern, Western und Eastern Europe since 2007 have significantly destabilised investment and growth in Europe.
- (2) With interest rates at zero, prices on the capital markets are distorted, which favours debt accumulation and speculation in financial markets (Schnabl and Hoffmann 2016). The economic structure is distorted in favour of investments with low returns (Borio et. 2016). Given fast rising real estate prices and nominal wage repression, price controls for instance in the form of minimum wages and rent brakes are introduced, thereby distorting price signals.
- (3) Competition is changing in favour of large firms, which have access to almost costless credit via capital markets. Small and medium-sized enterprises, on the other hand, are dependent on loans from small and medium-sized banks. The latter have to charge significantly higher interest rates than on the capital markets because monetary policy is depressing their margins

-

¹⁹ Erhard (1958: 91-92) had already doubted that the central bank financed credit expansion could generate growth and prosperity.

from the traditional banking business (Borio et al. 2017). A concentration process has begun in the corporate and banking sector.²⁰

- (4) The principle of private ownership is increasingly undermined in the financial markets because banks were nationalised during the course of the crisis. Many other banks would probably collapse if the European Central Bank would strongly tighten its monetary policy, lifting interest rates to the pre-crisis level. Gopinath et al. (2017) show that the decline of interest rates in South Europe since the introduction of the euro has come along with a significant decline of productivity gains. Forbearance lending of zombie banks seems to keep non-profitable zombie companies afloat, especially in South Europe.
- (5) In order to prevent further financial crises, a dense network of so-called macroprudential rules has emerged that restricts contractual freedom in the financial sector. The high costs of dealing with regulations constitute a further reason for mergers of small banks.
- (6) As the ECB implicitly guarantees monetary rescue operations in the event of financial crises, the liability principle is undermined: During the boom, speculative profits are privatized, inter alia in the form of generous bonuses; in the crisis, the state minimises losses. The implicit gurantees of loans in Southern European countries by the European Central Bank via the TARGET2 balances and the full allotment of funds to commercial banks in the course of unconventional monetary policy have softened the liability of both unprofitable banks and non-financial enterprises, especially in the south of the European monetary union.
- (7) Economic policy is no longer forward-looking because it favours ever larger crises which require ever larger rescue operations (Schnabl 2018).
- (8) The upshot is that from the point of view of financial markets, none of Eucken's principles is fulfilled anymore.

The extent to which the fundamental disruption of the German market order affects prosperity in Europe is controversial. Leading politicians stress that the Germans have never been better

-

²⁰ Gerstenberger and Schnabl (2016) show the concentration process in the Japanese banking sector caused by monetary policy.

off than they are today.²¹ Representatives of the European Central Bank argue that monetary policy crisis therapy has kept employment and incomes high through its positive impact on output, thus reducing household income inequality and overcompensating the losses of households from lower returns on their savings (Ampudia et al. 2018). Deutsche Bundesbank (2016) sees no negative distribution effects on income and wealth as a result of the very expansionary monetary policy.

In contrast, the ample provision of low-cost liquidity for banks and (indirectly) companies creates negative incentives, which are reminiscent of the soft budget constraints of the Central and Eastern European planned economies before 1990 (Hoffmann and Schnabl 2016). At that time, inefficient enterprises were granted unconditional loans by the state-controlled banking sector to prevent unemployment (Kornai 1986). The state banks' losses were covered by the money printing press. Inflation was suppressed by price controls. The result was a lack of efficiency gains and innovation. The continuing stagnation was accompanied by shortages in the supply of goods and services as well as by growing dissatisfaction among the population. From this point of view, monetary policy has overruled Erhard's (1958: 109) central idea that individual performance and personal responsibility should be at the centre of economic policy decision-making.²²

The distortion of prices on capital markets appears to have increasingly distorted the allocation of resources. Productivity growth in Germany and other European countries has declined significantly and is converging towards or even below zero (Fig. 4.)²³ Since productivity gains are the basis for real wage increases, the wages of growing parts of the population have come under pressure being accompanied by growing inequality (Piketty 2014).²⁴ Erhard's (1957: 208-220) insight that a market economy generates a fair real wage²⁵, seems to become increasingly overruled.

_

²¹ The German Chancellor <u>Angela Merkel</u> in the budget debate in the German Bundestag on 23.11.2016.

²² "What has brought us world-wide praise is the dynamic which we have developed, the will to expand, the courage to produce competitively and to carry responsibility." (Erhard 1958: 107).

²³ Cardarelli and Lusinyan (2015) show a similar development for the US.

In public perception, wage pressure and the resulting political dissatisfaction are mostly attributed to globalisation (Golder 2016).

[&]quot;This increase in economic efficiency is by no means an end in itself. The facts of the case of the social market economy can only be regarded as completely fulfilled when, in keeping with growing productivity, prices are lowered, thus making increases in real wages possible." (Erhard 1958: 158)

In Germany, real wage increases have been only slightly above zero since the mid-1990s. In the Southern European crisis, real wages have declined substantially following the outbreak of the crisis.²⁶ The wages of young people are usually lower than those of previous generations (Hoffmann and Schnabl 2016). The statistical compilation of real wages is strongly dependent on the consumption-based concept of price measurement, which does not include fast rising asset prices and tax burdens.

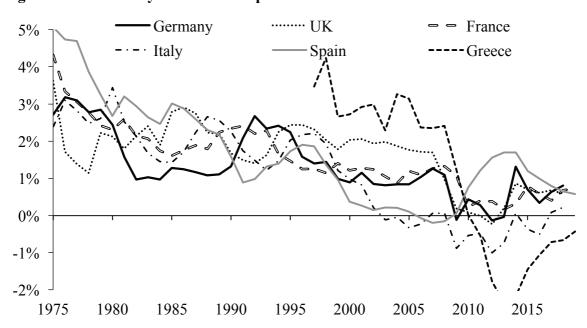


Figure 4: Productivity Gains in Europe

Source: Datastream, OECD, five-years moving averages.

Competition is disturbed because ultra-loose monetary policies favour large companies and investment banks. In large capital markets, investment banks benefit from cheap money (as they can best bet on asset prices being inflated by central banks), while the European Central Bank depresses the margins of small and medium-sized banks (Gerstenberger and Schnabl 2017). Whereas large non-financial enterprises have favourable financing conditions on the capital markets, with the European Central Bank also buying directly their bonds, small and medium-sized companies depend on the relatively high interest lending of small and medium-sized banks. This favors a concentration process in the financial and enterprise sectors.

_

²⁶ In Japan, real wage levels have been falling since the Japanese financial market crisis in 1998 (Latsos 2018).

Erhard's (1957) conviction that economic policy makers should not promote specific economic interests²⁷ seems to have been forgotten. Mergers among banks, which are a response to falling margins and higher costs originating in tighter regulation are welcomed by politicians.²⁸ In contrast, Erhard (157: 183-185) had warned that cartels were no way of overcoming crises, because this would prevent the organic resolution of the crisis and thus aggravate the crisis.²⁹

The loose monetary policy has strong distributional effects via asset prices (Saiki and Frost 2014, Hoffmann and Schnabl 2016). While rich and elderly people, who hold large parts of the assets, and some players in the financial markets benefit from the strong valuation effects of the cheap money, the savings deposits of the middle class have become non-interest bearing. Young people who aim to acquire shares and real estate have to spend significantly larger shares of their wage income than during the 1950s and 1960s.

An economic policy which increases inequality is perceived as unfair, with the number of dissatisfied people growing (Duarte 2018). Many of those who have experienced Germany's economic miracle complain about the gradual erosion of incentives and market forces as well as about high tax burdens and heavy social security contributions. Some find it unfair that exploding real estate prices and top salaries make a few richer, while the wages of a growing share of the population are under pressure and precarious employment is on the rise.

Voters across Europe are turning to new parties on the left or right side of the political spectrum that question the market economy and/or the given political order (Müller and Schnabl 2018). This contributes to further interventions in the market in form of trade barriers, minimum wages or rent brakes. Intervention spirals (Mises 1952) undermine the economic order in Europe.

-

²⁷ "The yardstick and criterion of what is good or bad in economic policy are not dogmas or the point of views of pressure groups, but exclusively the human being, the consumer, the people. Economic Policy can only be regarded as good if and as long as it is regarded simply as useful and welcomed by the individual." (Erhard 1958: 100-101)

The German minister of finance Scholz advocated a merger between Deutsche Bank and Commerzbank to create a very large German bank (Kayer 2018). Previously, the by-then minister of economic affairs Zypries (2017) had welcomed the takeover of Air Berlin by Lufthansa to crown a national champion.

[&]quot;The calculation never works out – but the crisis deepens." Erhard (1958: 135). "What can be protected and secured artifically by cartels are, at best, unproductive jobs, with the resulting danger that the whole national economy will cease to progress [...]." Erhard (1958: 136).

5. Outlook

European economic policy making faces large challenges. Of the three levels of sociality by Alfred Müller-Armack (1978), the endeavour to create equal living conditions in Europe has become predominant and is undermining the market forces. Since the generous promises of the European welfare states can no longer be financed solely by tax revenues, the European Central Bank fills the void with the money press. Erhard's maxim that one can only distribute a national product that has been produced beforehand seems to have been abandoned.

With the stable monetary order that once formed the foundations of the economic miracle in Germany and Europe, prosperity and cohesion in Europe are at risk. It is now evident throughout Europe that the welfare states and common European institutions, which are increasingly financed by the European Central Bank, are reaching their limits. The unintended and neglected negative growth and distribution effects of cheap money have become the breeding ground for growing social and political conflicts in Europe. Erhard (1958: 216) had remarked: "A bureaucratically manipulated Europe, breeding reciprocal mistrust rather than a sense of community, apparently materialistic in its whole attitude, will bring in its train more dangers than benefits for Europe."

That is why the return to the values promoted by Eucken (1952) and Erhard (1958) is urgent. Just as the stable Deutsche Mark was the backbone of the German economic miracle, a stability-oriented European monetary policy is today the prerequisite for economic and political stability in Europe. Since asset prices react more to monetary policy decisions than goods prices, the effects of monetary policy on the financial markets must be included in the decisions of the European Central Bank. Only if the ultra-loose monetary policy is reversed and thereby the breeding ground of new financial crises is contained, growth and wages can be stabilised and further negative distribution effects can be avoided. This would safeguard the valuable achievements of the 1948 German currency and economic reform and the European integration process.

References:

Abelshauser, Werner (1975): Wirtschaft in Westdeutschland 1945-1948. Deutsche Verlags-Anstalt, Stuttgart.

- Adam, Klaus et al. (2009): Baut die deutsche VWL nach internationalen Standards um! *Handelsblatt* 08.06.2009, 107, 9.
- Altmaier, Peter (2018): <u>Rede des Bundesministers für Wirtschaft und Energie</u>, Peter Altmaier, bei der Aussprache zur Regierungserklärung zu den Themen Wirtschaft und Energie vor dem Deutschen Bundestag, Berlin, 22.3.2018.
- Ampudia, Miguel / Georgarakos, Dimitris / Slacalek, Jiri / Tristiani, Oreste / Vermeulen, Philip / Violante, Giovanni 2018: Monetary Policy and Household Inequality. *ECB Working Paper* 2170.
- Borio, Claudio / Kharroubi, Enisse / Upper, Christian / Zampolli, Fabrizio 2016: Labour Reallocation and Productivity Dynamics: Financial Causes, Real Consequences. *BIS Working Papers* 534.
- Borio, Claudio / Gambarcorta, Leonardo / Hofmann, Boris 2017: The Influence of Monetary Policy on Bank Profitability. *International Finance* 20, 1, 48-63.
- Blank, Theodor 1967: Vom Ahlener Programm zu den Düsseldorfer Leitsätzen Zur Dogmengeschichte der CDU. Festgabe für Franz Etzel. In Alfred Müller-Armack (Hrsg.): Wirtschafts- und Finanzpolitik im Zeichen der sozialen Marktwirtschaft. Seewald, Stuttgart, 42.
- Böhm, Franz 1950: Wirtschaftsordnung und Staatsverfassung. Mohr, Tübingen.
- Buchheim, Christoph 1998: Die Errichtung der Bank deutscher Länder und die Währungsreform in Westdeutschland. In: Deutsche Bundesbank (Hrsg.): Fünfzig Jahre Deutsche Mark, München, 92-138.
- Burda, Michael / Seele, Stefanie 2016: No Role for the Hartz Reforms? Demand and Supply Factors in the German Labor Market, 1993-2014. *SFB 649 Discussion Paper* 2016-010.
- Cardarelli, Roberto / Lusinyan, Lusine 2015: *US Total Factor Productivity Slowdown:* Evidence from the US States. IMF Working Paper 15/116. International Monetary Fund, Washington D.C.
- De Grauwe, Paul 2012: *The Economics of Monetary Union*, 9th edition, Oxford, Oxford University Press.
- Deutsche Bundesbank 2016: Verteilungseffekte der Geldpolitik. Monatsbericht September 2016, 15-38.
- Duarte, Pablo 2018: Monetary Policy, Economic Privileges and Development: Ordoliberal Lessons for the EMU. *Mimeo*.
- Erhard, Ludwig 1958: Prosperity through Competition. Thames and Hudson, London.

- Eucken, Walter 1952: *Grundsätze der Wirtschaftspolitik*. Mohr und Polygraphischer Verlag, Tübingen und Zürich.
- Freytag, Andreas / Schnabl, Gunther 2017: Monetary Policy Crisis Management as a Threat to Economic Order. *Credit and Capital Markets* 50, 2, 151-169.
- Gerstenberger, Juliane / Schnabl, Gunther 2017: The Impact of Japanese Monetary Policy Crisis Management on the Japanese Banking Sector. *CESifo Working Paper 6440*.
- Golder, Matt 2016: Far Right Parties in Europe. *Annual Review of Political Science* 19, 477-497.
- Gopinath, Gita / Kalemli-Ozcan, Sebnem / Karabarbounis, Loukas / Villegas-Sanchez, Carolina 2017: Capital Allocation and Productivity in South Europe. *Quarterly Journal of Economics* 132, 4, 1915-1967.
- Hobolt, Sarah / de Vries, Catherine 2016. Public Support for European Integration. *Annual Review of Political Science* 19, 413-432.
- Hoffmann, Andreas / Schnabl, Gunther 2016: The Adverse Effects of Unconventional Monetary Policy. *Cato Journal 36*, *3*, 449-484.
- Hughes, Michael 1999: Shouldering the Burdens of Defeat: West Germany and the Reconstruction of Social Justice. University of North Carolina Press, Chapel Hill.
- Jánossy, Franz 1966: Das Ende der Wirtschaftswunder. Verlag neue Kritik, Frankfurt am Main.
- Jaumotte, Florence / Sodsriwiboon, Piyaporn 2010: Current Account Imbalances in Southern Euro Area. *IMF Working Paper* 10/139.
- Kayser, Stefan 2018: Mögliche Fusion Deutscher Bank und Commerzbank. Es wäre eine Hochzeit aus Angst vor dem Tod. *Spiegel Online* 11.9.2018.
- Kindleberger, Charles 1973: *The World Depresssion* 1929-1939. University of California Press, Berkeley.
- Kornai, Janos (1986): The Soft Budget Constraint. Kyklos 39, 1, 3–30.
- Latsos, Sophia 2018: Real Wage Effects of Japan's Monetary Policy. *University of Leipzig Faculty of Economics and Management Science Working Paper* 153.
- Mises, Ludwig von 1952: *Planning for Freedom: Let the Market System Work: a Collection of Essays and Addresses.* Liberty Fund Library of the Works of Ludwig von Mises, Liberty Fund, Indianapolis.
- Müller, Sebastian / Schnabl, Gunther 2018: The Brexit as a Forerunner: Monetary Policy, Economic Order and Divergence Forces in the European Union. *CESifo Working Paper* 6938 (2018).
- Müller-Armack, Alfred 1947: Wirtschaftslenkung und Marktwirtschaft. Verlag für Wirtschaft und Sozialpolitik, Hamburg.

- Müller-Armack, Alfred 1956: Soziale Marktwirtschaft. In Beckerath, Erwin von / Bente, Carl u.a. (Hrsg.): Handwörterbuch der Sozialwissenschaften: zugleich Neuauflage des Handwörterbuch der Staatswissenschaften. Fischer, Stuttgart. Band 9, 390.
- Müller-Armack, Alfred 1978: The Social Market Economy as an Economic and Social Order. *Review of Social Economy* 36, 3, 325–331.
- Piketty, Thomas 2014. *Capital in the Twenty-First Century*. The Belknap Press of Harvard University Press, Cambridge Massachusetts.
- Ritschl, Albrecht 1983: Die Währungsreform von 1948 und der Wiederaufstieg der westdeutschen Industrie. *Vierteljahreshefte für Zeitgeschichte* 33, 1, 136-165.
- Ritschl, Albrecht 2005: Der späte Fluch des Dritten Reichs: Pfadabhängigkeit in der Entstehung der bundesdeutschen Wirtschaftsordnung. *Perspektiven der Wirtschaftspolitik* 6, 2, 151-170.
- Ritschl, Albrecht 2016: Soziale Marktwirtschaft in der Praxis. In: Abelshauser, Werner (Hrsg.): *Das Bundeswirtschaftsministerium in der Ära der Sozialen Marktwirtschaft.* De Gruyter, Berlin/Boston.
- Rhonheimer, Martin 2017: Ludwig Erhards Konzept der sozialen Marktwirtschaft und seine wettbewerbstheoretischen Grundlagen. *Journal for Markets and Ethics* 5, 2, 83-106.
- Rodrik, Dani 2018: Populism and the Economics of Globalization. *Journal of International Business Policy* 1, 1-2, 12-33.
- Schnabl, Gunther 2018: The Failure of ECB Monetary Policy from a Mises/Hayek Perspective. In Godart-van der Kroon, Annette / Vonlanthen, Patrik (eds.): Banking and Monetary Policy from the Perspective of Austrian Economics, Springer, Berlin 2018, 127-152.
- Saiki, Ayako / Frost, Jon 2014: Does Unconventional Monetary Policy Affect Inequality? Evidence from Japan. *Applied Economics* 46, 36, 445-4454.
- Sinn, Hans-Werner / Wollmershäuser, Timo 2012: Target Loans, Current Account Balances and Capital Flows: the ECB's Rescue Facility. *International Tax and Finance* 19, 4, 468-508.
- Sinn, Hans-Werner 2018: The ECB's Fiscal Policy. NBER Working Paper 24613.
- Statista (2018): https://de.statista.com/statistik/daten/studie/214816/umfrage/ansichten-ueber-die-soziale-marktwirtschaft/
- Zypries, Brigitte 2017: Der deutsche Luftfahrtstandort ist gut aufgestellt. *Interview mit dem Handelsblatt*, 21.08.2017.

Universität LeipzigWirtschaftswissenschaftliche Fakultät

Nr. 1	Wolfgang Bernhardt	Stock Options wegen oder gegen Shareholder Value? Vergütungsmodelle für Vorstände und Führungskräfte 04/1998
Nr. 2	Thomas Lenk / Volkmar Teichmann	Bei der Reform der Finanzverfassung die neuen Bundesländer nicht vergessen! 10/1998
Nr. 3	Wolfgang Bernhardt	Gedanken über Führen – Dienen – Verantworten 11/1998
Nr. 4	Kristin Wellner	Möglichkeiten und Grenzen kooperativer Standortgestaltung zur Revitalisierung von Innenstädten 12/1998
Nr. 5	Gerhardt Wolff	Brauchen wir eine weitere Internationalisierung der Betriebswirtschaftslehre? 01/1999
Nr. 6	Thomas Lenk / Friedrich Schneider	Zurück zu mehr Föderalismus: Ein Vorschlag zur Neugestaltung des Finanzausgleichs in der Bundesrepublik Deutschland unter besonderer Berücksichtigung der neuen Bundesländer 12/1998
Nr: 7	Thomas Lenk	Kooperativer Förderalismus – Wettbewerbsorientierter Förderalismus 03/1999
Nr. 8	Thomas Lenk / Andreas Mathes	EU – Osterweiterung – Finanzierbar? 03/1999
Nr. 9	Thomas Lenk / Volkmar Teichmann	Die fisikalischen Wirkungen verschiedener Forderungen zur Neugestaltung des Länderfinanz-ausgleichs in der Bundesrepublik Deutschland: Eine empirische Analyse unter Einbeziehung der Normenkontrollanträge der Länder Baden-Würtemberg, Bayern und Hessen sowie der Stellungnahmen verschiedener Bundesländer 09/1999
Nr. 10	Kai-Uwe Graw	Gedanken zur Entwicklung der Strukturen im Bereich der Wasserversorgung unter besonderer Berücksichtigung kleiner und mittlerer Unternehmen 10/1999
Nr. 11	Adolf Wagner	Materialien zur Konjunkturforschung 12/1999
Nr. 12	Anja Birke	Die Übertragung westdeutscher Institutionen auf die ostdeutsche Wirklichkeit – ein erfolg-versprechendes Zusammenspiel oder Aufdeckung systematischer Mängel? Ein empirischer Bericht für den kommunalen Finanzausgleich am Beispiel Sachsen 02/2000
Nr. 13	Rolf H. Hasse	Internationaler Kapitalverkehr in den letzten 40 Jahren – Wohlstandsmotor oder Krisenursache? 03/2000
Nr. 14	Wolfgang Bernhardt	Unternehmensführung (Corporate Governance) und Hauptversammlung 04/2000
Nr. 15	Adolf Wagner	Materialien zur Wachstumsforschung 03/2000
Nr. 16	Thomas Lenk / Anja Birke	Determinanten des kommunalen Gebührenaufkommens unter besonderer Berücksichtigung der neuen Bundesländer 04/2000
Nr. 17	Thomas Lenk	Finanzwirtschaftliche Auswirkungen des Bundesverfassungsgerichtsurteils zum Länderfinanzausgleich vom 11.11.1999 04/2000
Nr. 18	Dirk Bültel	Continous linear utility for preferences on convex sets in normal real vector spaces 05/2000
Nr. 19	Stefan Dierkes / Stephanie Hanrath	Steuerung dezentraler Investitionsentscheidungen bei nutzungsabhängigem und nutzungsunabhängigem Verschleiß des Anlagenvermögens 06/2000
Nr. 20	Thomas Lenk / Andreas Mathes / Olaf Hirschefeld	Zur Trennung von Bundes- und Landeskompetenzen in der Finanzverfassung Deutschlands 07/2000
Nr. 21	Stefan Dierkes	Marktwerte, Kapitalkosten und Betafaktoren bei wertabhängiger Finanzierung 10/2000
Nr. 22	Thomas Lenk	Intergovernmental Fiscal Relationships in Germany: Requirement for New Regulations? 03/2001
Nr. 23	Wolfgang Bernhardt	Stock Options – Aktuelle Fragen Besteuerung, Bewertung, Offenlegung 03/2001
Nr. 24	Thomas Lenk	Die "kleine Reform" des Länderfinanzausgleichs als Nukleus für die "große Finanzverfassungs-reform"? 10/2001

Nr. 25	Wolfgang Bernhardt	Biotechnologie im Spannungsfeld von Menschenwürde, Forschung, Markt und Moral Wirtschaftsethik zwischen Beredsamkeit und Schweigen 11/2001
Nr. 26	Thomas Lenk	Finanzwirtschaftliche Bedeutung der Neuregelung des bundestaatlichen Finanzausgleichs – Eine allkoative und distributive Wirkungsanalyse für das Jahr 2005 11/2001
Nr. 27	Sören Bär	Grundzüge eines Tourismusmarketing, untersucht für den Südraum Leipzig 05/2002
Nr. 28	Wolfgang Bernhardt	Der Deutsche Corporate Governance Kodex: Zuwahl (comply) oder Abwahl (explain)? 06/2002
Nr. 29	Adolf Wagner	Konjunkturtheorie, Globalisierung und Evolutionsökonomik 08/2002
Nr. 30	Adolf Wagner	Zur Profilbildung der Universitäten 08/2002
Nr. 31	Sabine Klinger / Jens Ulrich / Hans-Joachim Rudolph	Konjunktur als Determinante des Erdgasverbrauchs in der ostdeutschen Industrie? 10/2002
Nr. 32	Thomas Lenk / Anja Birke	The Measurement of Expenditure Needs in the Fiscal Equalization at the Local Level Empirical Evidence from German Municipalities 10/2002
Nr. 33	Wolfgang Bernhardt	Die Lust am Fliegen Eine Parabel auf viel Corporate Governance und wenig Unternehmensführung 11/2002
Nr. 34	Udo Hielscher	Wie reich waren die reichsten Amerikaner wirklich? (US-Vermögensbewertungsindex 1800 – 2000) 12/2002
Nr. 35	Uwe Haubold / Michael Nowak	Risikoanalyse für Langfrist-Investments Eine simulationsbasierte Studie 12/2002
Nr. 36	Thomas Lenk	Die Neuregelung des bundesstaatlichen Finanzausgleichs auf Basis der Steuerschätzung Mai 2002 und einer aktualisierten Bevölkerungsstatistik 12/2002
Nr. 37	Uwe Haubold / Michael Nowak	Auswirkungen der Renditeverteilungsannahme auf Anlageentscheidungen Eine simulationsbasierte Studie 02/2003
Nr. 38	Wolfgang Bernhard	Corporate Governance Kondex für den Mittel-Stand? 06/2003
Nr. 39	Hermut Kormann	Familienunternehmen: Grundfragen mit finanzwirtschaftlichen Bezug 10/2003
Nr. 40	Matthias Folk	Launhardtsche Trichter 11/2003
Nr. 41	Wolfgang Bernhardt	Corporate Governance statt Unternehmensführung 11/2003
Nr. 42	Thomas Lenk / Karolina Kaiser	Das Prämienmodell im Länderfinanzausgleich – Anreiz- und Verteilungsmitwirkungen 11/2003
Nr. 43	Sabine Klinger	Die Volkswirtschaftliche Gesamtrechnung des Haushaltsektors in einer Matrix 03/2004
Nr. 44	Thomas Lenk / Heide Köpping	Strategien zur Armutsbekämpfung und -vermeidung in Ostdeutschland: 05/2004
Nr. 45	Wolfgang Bernhardt	Sommernachtsfantasien Corporate Governance im Land der Träume. 07/2004
Nr. 46	Thomas Lenk / Karolina Kaiser	The Premium Model in the German Fiscal Equalization System 12/2004
Nr. 47	Thomas Lenk / Christine Falken	Komparative Analyse ausgewählter Indikatoren des Kommunalwirtschaftlichen Gesamt-ergebnisses 05/2005
Nr. 48	Michael Nowak / Stephan Barth	Immobilienanlagen im Portfolio institutioneller Investoren am Beispiel von Versicherungsunternehmen Auswirkungen auf die Risikosituation 08/2005
Nr. 49	Wolfgang Bernhardt	Familiengesellschaften – Quo Vadis? Vorsicht vor zu viel "Professionalisierung" und Ver-Fremdung 11/2005
Nr. 50	Christian Milow	Der Griff des Staates nach dem Währungsgold 12/2005

Nr. 51	Anja Eichhorst / Karolina Kaiser	The Institutional Design of Bailouts and Its Role in Hardening Budget Constraints in Federations 03/2006
Nr. 52	Ullrich Heilemann / Nancy Beck	Die Mühen der Ebene – Regionale Wirtschaftsförderung in Leipzig 1991 bis 2004 08/2006
Nr. 53	Gunther Schnabl	Die Grenzen der monetären Integration in Europa 08/2006
Nr. 54	Hermut Kormann	Gibt es so etwas wie typisch mittelständige Strategien? 11/2006
Nr. 55	Wolfgang Bernhardt	(Miss-)Stimmung, Bestimmung und Mitbestimmung Zwischen Juristentag und Biedenkopf-Kommission 11/2006
Nr. 56	Ullrich Heilemann / Annika Blaschzik	Indicators and the German Business Cycle A Multivariate Perspective on Indicators of Ifo, OECD, and ZEW 01/2007
Nr. 57	Ullrich Heilemann	"The Suol of a new Machine" zu den Anfängen des RWI-Konjunkturmodells 12/2006
Nr. 58	Ullrich Heilemann / Roland Schuhr / Annika Blaschzik	Zur Evolution des deutschen Konjunkturzyklus 1958 bis 2004 Ergebnisse einer dynamischen Diskriminanzanalyse 01/2007
Nr. 59	Christine Falken / Mario Schmidt	Kameralistik versus Doppik Zur Informationsfunktion des alten und neuen Rechnungswesens der Kommunen Teil I: Einführende und Erläuternde Betrachtungen zum Systemwechsel im kommunalen Rechnungswesen 01/2007
Nr. 60	Christine Falken / Mario Schmidt	Kameralistik versus Doppik Zur Informationsfunktion des alten und neuen Rechnungswesens der Kommunen Teil II Bewertung der Informationsfunktion im Vergleich 01/2007
Nr. 61	Udo Hielscher	Monti della citta di firenze Innovative Finanzierungen im Zeitalter Der Medici. Wurzeln der modernen Finanzmärkte 03/2007
Nr. 62	Ullrich Heilemann / Stefan Wappler	Sachsen wächst anders Konjunkturelle, sektorale und regionale Bestimmungsgründe der Entwicklung der Bruttowertschöpfung 1992 bis 2006 07/2007
Nr. 63	Adolf Wagner	Regionalökonomik: Konvergierende oder divergierende Regionalentwicklungen 08/2007
Nr. 64	Ullrich Heilemann / Jens Ulrich	Good bye, Professir Phillips? Zum Wandel der Tariflohndeterminanten in der Bundesrepublik 1952 – 2004 08/2007
Nr. 65	Gunther Schnabl / Franziska Schobert	Monetary Policy Operations of Debtor Central Banks in MENA Countries 10/2007
Nr. 66	Andreas Schäfer / Simone Valente	Habit Formation, Dynastic Altruism, and Population Dynamics 11/2007
Nr. 67	Wolfgang Bernhardt	5 Jahre Deutscher Corporate Governance Kondex Eine Erfolgsgeschichte? 01/2008
Nr. 68	Ullrich Heilemann / Jens Ulrich	Viel Lärm um wenig? Zur Empirie von Lohnformeln in der Bundesrepublik 01/2008
Nr. 69	Christian Groth / Karl-Josef Koch / Thomas M. Steger	When economic growth is less than exponential 02/2008
Nr. 70	Andreas Bohne / Linda Kochmann	Ökonomische Umweltbewertung und endogene Entwicklung peripherer Regionen Synthese einer Methodik und einer Theorie 02/2008
Nr. 71	Andreas Bohne / Linda Kochmann / Jan Slavík / Lenka Slavíková	Deutsch-tschechische Bibliographie Studien der kontingenten Bewertung in Mittel- und Osteuropa 06/2008
Nr. 72	Paul Lehmann / Christoph Schröter-Schlaack	Regulating Land Development with Tradable Permits: What Can We Learn from Air Pollution Control? 08/2008
Nr. 73	Ronald McKinnon / Gunther Schnabl	China's Exchange Rate Impasse and the Weak U.S. Dollar 10/2008
Nr: 74	Wolfgang Bernhardt	Managervergütungen in der Finanz- und Wirtschaftskrise Rückkehr zu (guter) Ordnung, (klugem) Maß und (vernünftigem) Ziel? 12/2008

Nr. 75	Moritz Schularick / Thomas M. Steger	Financial Integration, Investment, and Economic Growth: Evidence From Two Eras of Financial Globalization 12/2008
Nr. 76	Gunther Schnabl / Stephan Freitag	An Asymmetry Matrix in Global Current Accounts 01/2009
Nr. 77	Christina Ziegler	Testing Predictive Ability of Business Cycle Indicators for the Euro Area 01/2009
Nr. 78	Thomas Lenk / Oliver Rottmann / Florian F. Woitek	Public Corporate Governance in Public Enterprises Transparency in the Face of Divergent Positions of Interest 02/2009
Nr. 79	Thomas Steger / Lucas Bretschger	Globalization, the Volatility of Intermediate Goods Prices, and Economic Growth 02/2009
Nr. 80	Marcela Munoz Escobar / Robert Holländer	Institutional Sustainability of Payment for Watershed Ecosystem Services. Enabling conditions of institutional arrangement in watersheds 04/2009
Nr. 81	Robert Holländer / WU Chunyou / DUAN Ning	Sustainable Development of Industrial Parks 07/2009
Nr. 82	Georg Quaas	Realgrößen und Preisindizes im alten und im neuen VGR-System 10/2009
Nr. 83	Ullrich Heilemann / Hagen Findeis	Empirical Determination of Aggregate Demand and Supply Curves: The Example of the RWI Business Cycle Model 12/2009
Nr. 84	Gunther Schnabl / Andreas Hoffmann	The Theory of Optimum Currency Areas and Growth in Emerging Markets 03/2010
Nr. 85	Georg Quaas	Does the macroeconomic policy of the global economy's leader cause the worldwide asymmetry in current accounts? 03/2010
Nr. 86	Volker Grossmann / Thomas M. Steger / Timo Trimborn	Quantifying Optimal Growth Policy 06/2010
Nr. 87	Wolfgang Bernhardt	Corporate Governance Kodex für Familienunternehmen? Eine Widerrede 06/2010
Nr. 88	Philipp Mandel / Bernd Süssmuth	A Re-Examination of the Role of Gender in Determining Digital Piracy Behavior 07/2010
Nr. 89	Philipp Mandel / Bernd Süssmuth	Size Matters. The Relevance and Hicksian Surplus of Agreeable College Class Size 07/2010
Nr. 90	Thomas Kohstall / Bernd Süssmuth	Cyclic Dynamics of Prevention Spending and Occupational Injuries in Germany: 1886-2009 07/2010
Nr. 91	Martina Padmanabhan	Gender and Institutional Analysis. A Feminist Approach to Economic and Social Norms 08/2010
Nr. 92	Gunther Schnabl /Ansgar Belke	Finanzkrise, globale Liquidität und makroökonomischer Exit 09/2010
Nr. 93	Ullrich Heilemann / Roland Schuhr / Heinz Josef Münch	A "perfect storm"? The present crisis and German crisis patterns 12/2010
Nr. 94	Gunther Schnabl / Holger Zemanek	Die Deutsche Wiedervereinigung und die europäische Schuldenkrise im Lichte der Theorie optimaler Währungsräume 06/2011
Nr. 95	Andreas Hoffmann / Gunther Schnabl	Symmetrische Regeln und asymmetrisches Handeln in der Geld- und Finanzpolitik 07/2011
Nr. 96	Andreas Schäfer / Maik T. Schneider	Endogenous Enforcement of Intellectual Property, North-South Trade, and Growth 08/2011
Nr. 97	Volker Grossmann / Thomas M. Steger / Timo Trimborn	Dynamically Optimal R&D Subsidization 08/2011
Nr. 98	Erik Gawel	Political drivers of and barriers to Public-Private Partnerships: The role of political involvement 09/2011
Nr. 99	André Casajus	Collusion, symmetry, and the Banzhaf value 09/2011
Nr. 100	Frank Hüttner / Marco Sunder	Decomposing R^2 with the Owen value $10/2011$
Nr. 101	Volker Grossmann / Thomas M. Steger / Timo Trimborn	The Macroeconomics of TANSTAAFL 11/2011

Nr. 102	Andreas Hoffmann	Determinants of Carry Trades in Central and Eastern Europe 11/2011
Nr. 103	Andreas Hoffmann	Did the Fed and ECB react asymmetrically with respect to asset market developments? 01/2012
Nr. 104	Christina Ziegler	Monetary Policy under Alternative Exchange Rate Regimes in Central and Eastern Europe 02/2012
Nr. 105	José Abad / Axel Löffler / Gunther Schnabl / Holger Zemanek	Fiscal Divergence, Current Account and TARGET2 Imbalances in the EMU 03/2012
Nr. 106	Georg Quaas / Robert Köster	Ein Modell für die Wirtschaftszweige der deutschen Volkswirtschaft: Das "MOGBOT" (Model of Germany's Branches of Trade)
Nr. 107	Andreas Schäfer / Thomas Steger	Journey into the Unknown? Economic Consequences of Factor Market Integration under Increasing Returns to Scale 04/2012
Nr. 108	Andreas Hoffmann / Björn Urbansky	Order, Displacements and Recurring Financial Crises 06/2012
Nr. 109	Finn Marten Körner / Holger Zemanek	On the Brink? Intra-euro area imbalances and the sustainability of foreign debt 07/2012
Nr. 110	André Casajus / Frank Hüttner	Nullifying vs. dummifying players or nullified vs. dummified players: The difference between the equal division value and the equal surplus division value 07/2012
Nr. 111	André Casajus	Solidarity and fair taxation in TU games 07/2012
Nr. 112	Georg Quaas	Ein Nelson-Winter-Modell der deutschen Volkswirtschaft 08/2012
Nr. 113	André Casajus / Frank Hüttner	Null players, solidarity, and the egalitarian Shapley values 08/2012
Nr. 114	André Casajus	The Shapley value without efficiency and additivity 11/2012
Nr. 115	Erik Gawel	Neuordnung der W-Besoldung: Ausgestaltung und verfassungsrechtliche Probleme der Konsumtionsregeln zur Anrechnung von Leistungsbezügen 02/2013
Nr. 116	Volker Grossmann / Andreas Schäfer / Thomas M. Steger	Migration, Capital Formation, and House Prices 02/2013
Nr. 117	Volker Grossmann / Thomas M. Steger	Optimal Growth Policy: the Role of Skill Heterogeneity 03/2013
Nr. 118	Guido Heineck / Bernd Süssmuth	A Different Look at Lenin's Legacy: Social Capital and Risk Taking in the Two Germanies 03/2013
Nr. 119	Andreas Hoffmann	The Euro as a Proxy for the Classical Gold Standard? Government Debt Financing and Political Commitment in Historical Perspective 05/2013
Nr. 120	Andreas Hoffmann / Axel Loeffler	Low Interest Rate Policy and the Use of Reserve Requirements in Emerging Markets 05/2013
Nr. 121	Gunther Schnabl	The Global Move into the Zero Interest Rate and High Dept Trap 07/2013
Nr. 122	Axel Loeffler / Gunther Schnabl / Franziska Schobert	Limits of Monetary Policy Autonomy and Exchange Rate Flexibility by East Asian Central Banks 08/2013
Nr. 123	Burkhard Heer / Bernd Süßmuth	Tax Bracket Creep and its Effects on Income Distribution 08/2013
Nr. 124	Hans Fricke / Bernd Süßmuth	Growth and Volatility of Tax Revenues in Latin America 08/2013
Nr. 125	Ulrich Volz	RMB Internationalisation and Currency Co-operation in East Asia 09/2013
Nr. 126	André Casajus / Helfried Labrenz	A property rights based consolidation approach 02/2014
Nr. 127	Pablo Duarte	The Relationship between GDP and the Size of the Informal Economy: Empirical Evidence for Spain $02/2014$
Nr. 128	Erik Gawel	Neuordnung der Professorenbesoldung in Sachsen 03/2014
Nr. 129	Friedrun Quaas	Orthodoxer Mainstream und Heterodoxe Alternativen Eine Analyse der ökonomischen Wissenschaftslandschaft 04/2014
Nr. 130	Gene Callahan / Andreas Hoffmann	The Idea of a Social Cycle 05/2014

Nr. 131	Karl Trela	Klimaanpassung als wirtschaftspolitisches Handlungsfeld 06/2014
Nr. 132	Erik Gawel / Miquel Aguado	Neuregelungen der W-Besoldung auf dem verfassungsrechtlichen Prüfstand 08/2014
Nr. 133	Ulf Papenfuß / Matthias Redlich / Lars Steinhauer	Forschend und engagiert lernen im Public Management: Befunde und Gestaltungsanregungen eines Service Learning Lehrforschungsprojektes 10/2014
Nr. 134	Karl Trela	Political climate adaptation decisions in Germany - shortcomings and applications for decision support systems 11/2014
Nr. 135	Ulf Papenfuß / Lars Steinhauer / Benjamin Friedländer	Beteiligungsberichterstattung der öffentlichen Hand im 13-Länder-Vergleich: Erfordernisse für mehr Transparenz über die Governance und Performance öffentlicher Unternehmen 02/2015
Nr. 136	Gunther Schnabl	Japans Lehren für das Schweizer Wechselkursdilemma 02/2015
Nr. 137	Ulf Papenfuß / Christian Schmidt	Determinants of Manager Pay in German State-Owned Enterprises and International Public Policy Implications: 3-Year Study for Sectors, Performance and Gender 02/2015
Nr. 138	Philipp Mandel / Bernd Süßmuth	Public education, accountability, and yardstick competition in a federal system 05/2015
Nr. 139	Gunther Schnabl	Wege zu einer stabilitäts- und wachstumsorientierten Geldpolitik aus österreichischer Perspektive 06/2015
Nr. 140	Ulf Papenfuß / Matthias Redlich / Lars Steinhauer / Benjamin Friedländer	Forschend und engagiert lernen im Public Management: Befunde und Gestaltungsanregungen eines Service Learning Lehrforschungsprojektes – 2. aktualisierte Auflage 08/2015
Nr. 141	Friedrun Quaas / Georg Quaas	Hayeks Überinvestitionstheorie 10/2015
Nr. 142	Bastian Gawellek / Marco Sunder	The German Excellence Initiative and Efficiency Change among Universities, 2001-2011 01/2016
Nr. 143	Benjamin Larin	Bubble-Driven Business Cycles 02/2016
Nr. 144	Friedrun Quaas / Georg Quaas	Effekte des Kapitalmarktzinses auf die Preis- und Produktivitätsentwicklung Eine Analyse der deutschen Volkswirtschaft 1970-2014 02/2016
Nr. 145	Thomas Lenk / Matthias Redlich / Philipp Glinka	Nachhaltige Stadtfinanzen -Akzeptanzsteigerung der bürgerschaftlichen Beteiligung an der Haushaltsplanung 02/2016
Nr. 146	Michael von Prollius / Gunther Schnabl	Geldpolitik, Arabellion, Flüchtlingskrise 10/2016
Nr. 147	David Leuwer / Bernd Süßmuth	The Exchange Rate Susceptibility of European Core Industries, 1995-2010 05/2017
Nr. 148	Gunther Schnabl	Monetary Policy and Wandering Overinvestment Cycles in East Asia and Europe 05/2017
Nr. 149	Ullrich Heilemann / Karsten Müller	Wenig Unterschiede – Zur Treffsicherheit internationaler Prognosen und Prognostiker 07/2017
Nr. 150	Gunther Schnabl / Sebastian Müller	Zur Zukunft der Europäischen Union aus ordnungspolitischer Perspektive 10/2017
Nr. 151	Gunther Schnabl	Ultra-lockere Geldpolitiken, Finanzmarktblasen und marktwirtschaftliche Ordnung 10/2017
Nr. 152	Pablo Duarte / Bernd Süßmuth	Implementing an approximate dynamic factor model to nowcast GDP using sensitivity analysis 02/2018
Nr. 153	Sophia Latsos	Real Wage Effects of Japan's Monetary Policy 03/2018
Nr. 154	Gunther Schnabl / Klaus Siemon	Die EU-Insolvenzrichtlinie zu vorinsolvenzlichen Verfahren aus ordnungspolitischer Perspektive The EU Directive on Preventive Restructuring Frameworks from a Ordoliberal Perspective 07/2018
Nr. 155	Marika Behnert / Thomas Bruckner	Cost effects of energy system stability and flexibility options – an integrated optimal power flow modeling approach 09/2018
Nr. 156	Gunther Schnabl	70 Years after the German Currency and Economic Reform: The Monetary, Economic and Political Order in Europe is Disturbed 10/2018