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Aligning financial systems to meet the needs of citizens and enterprises

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Summary: The European Commission's current initiative to commence consultations on the action plan to build a Capital Markets Union is to be welcomed. The objective must be to create a stable and sustainable financial system, providing all households and companies with appropriate access to financial services. Measures implemented in connection with the aspired-to Capital Markets Union must in no way weaken the classic bank loan and bypass the needs of companies. What is important in the first instance is a critical review of existing financial market regulation. The objective should be an integrated regulatory framework, avoiding regulatory duplication and inconsistencies, while taking account of cross-references to the respective regulations.

Zusammenfassung: Der aktuelle Antritt der Europäischen Kommission, den Aktionsplan zur Kapitalmarktunion zu überprüfen, ist zu begrüßen. Das Ziel muss es sein, ein stabiles und nachhaltiges Finanzsystem zu schaffen, das allen Haushalten und Unternehmen angemessenen Zugang zu Finanzdienstleistungen gewährt. Die Maßnahmen der Kapitalmarktunion dürfen keinesfalls den Bankkredit an den Bedürfnissen der Unternehmen vorbei schwächen. Wichtig ist zunächst eine Überprüfung der bestehenden Finanzmarktregulierung. Ziel sollte ein Regelungsgefüge aus einem Guss sein, das Doppelregulierungen und Inkonsistenzen vermeidet und die Querbezüge zu den jeweiligen Regulierungen berücksichtigt.

→ JEL Classification: D14, D16, G2, G3, R51

→ Keywords: Bank-based system, bank lending, capital market, corporate financing, decentralized financial institutions, economic development, financial industry, financial market regulation, household saving, market-based system, proportionality

I **Contextualization: What is the ultimate aim of the Capital Markets Union?**

Societal and economic trends are closely interrelated, and this applies to each individual just as it does to entire economies. Economic and personal freedom, developmental opportunities, and a secure social environment are important conditions for growth. It is the European Commission's declared goal to invigorate investment and growth across Europe. This is a goal well worth supporting. In order to attain this goal, the European Commission has declared the creation of a European Capital Markets Union to be a vital political project. Corporate and infrastructure investment are to be boosted by deepening the single market for capital and by strengthening capital market-based forms of financing (see European Commission 2015).

2 **The function and importance of the financial system**

In principle, the financial industry and the financial market play a crucial role in the economic development of a given economy. The transformation of savings into loans, especially those generated by private households, enables investment that creates growth and employment.

Like the capital market, financial institutions make it possible for savings and investment to be matched precisely. Adjustments relate both to the size, term structure, and risk profile of the asset/investment, as well as to the frequent information asymmetries between the involved parties. However, more pronounced differences become apparent if one goes into further detail.

By way of illustration, maturity transformation works far more easily if undertaken by financial institutions than if the capital market is involved. In the case of a capital market investment, the party that purchases a security bears the price fluctuation risk and the default risk in full. In contrast, financial institutions assume the burden of risk transformation themselves.

Another key difference relates to the dissemination of information. In particular, regional financial institutions enjoy a decisive advantage in terms of gathering information: they are located "on the spot", thus being in a position to make an especially accurate assessment of the counterparty to a loan agreement (credit risk) (see Gärtner and Flögel 2013). A private household is, in most cases, much less able than a financial institution to form an adequate appraisal of a company seeking credit and of its business prospects. Without financial institutions, it has to rely on investment advisors and/or rating agencies, which have proven to be fallible in many cases (see Kotz and Schäfer 2013).

In numerous cases, private households do not wish to—or are unable to—directly participate in the capital market. In addition, many companies—particularly small and medium-sized enterprises—prefer to use a banking institution as an intermediary rather than engaging directly in the capital market. This is because information asymmetries are considerably higher in the case of a capital market investment.

However, the conception of the correct incentive structures is not only relevant on a micro level for the individual decision-making of companies and private households. It is also very important to anticipate the decisions of capital market investors when considering a policy that aims to ex-

pand the domain of capital markets. If capital adequacy standards are not sufficiently stringent, excessive debt levels can jeopardize the equilibrium of an economy.

Capital markets are prone to substantial valuation errors, to mispricing with potentially highly detrimental consequences. In the final analysis, the true trigger of the Great Financial Crisis was the build-up of bubbles, fed by rampant speculation, with structured products—i. e. in plain English: securitized claims. In line with this, Germany's Council of Economic Experts argues that capital markets may cause a misallocation of capital in the event of asymmetrical information and that such markets harbor latent stability risks and regularly display pro-cyclical behavior (Sachverständigenrat 2015: 206). Given that shocks come in all sorts of variants, a diversified landscape of small financial institutions is significantly more shock-resistant than the monolithic structure of large capital markets.

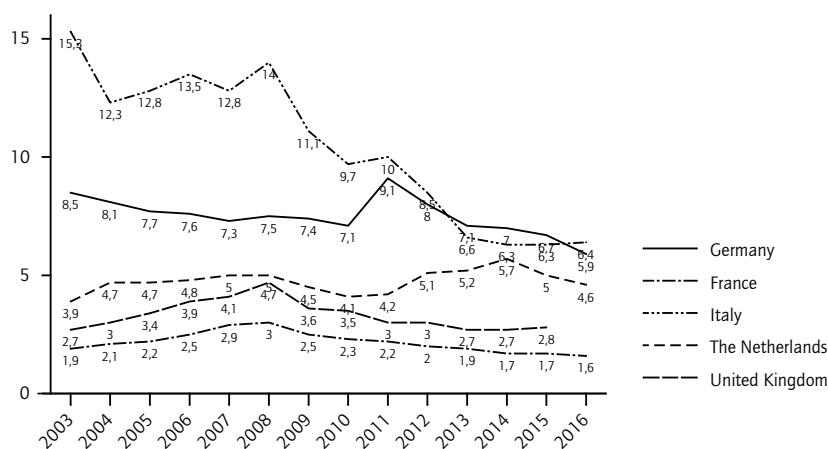
3 Financial systems as a reflection of the real economy and of society

3.1 Diversity translates into growth

Whether a financial system is predominantly market-based or bank-based has no measurable influence on economic growth. From a historical point of view, financial systems appear to have evolved endogenously as an efficient response to the challenges raised by their respective economic environment (see Behr, Norden, and Noth 2013: 3473). In its 2015/16 Annual Report, the German Council of Economic Experts once again emphasized that the financing structure most

Figure 1

Ratio of loans to companies to corporate bonds



Source: Eurostat, Bank of England.

conducive to growth probably depends on the specific characteristics of the country concerned (Sachverständigenrat 2015: 205).

Accordingly, financial systems skewed more toward the bank-based model coexist in Europe with more capital market-oriented models. The “bank-based” countries include, for example, Germany, Italy, and Spain. Systems with a more pronounced capital market orientation are found in the Netherlands, France, and the United Kingdom (see Figure 1).

As the following overview demonstrates, a systematic inverse correlation between growth and a higher degree of credit financing cannot be detected when looking at the growth rates of the countries/country groups under review (Figure 2).

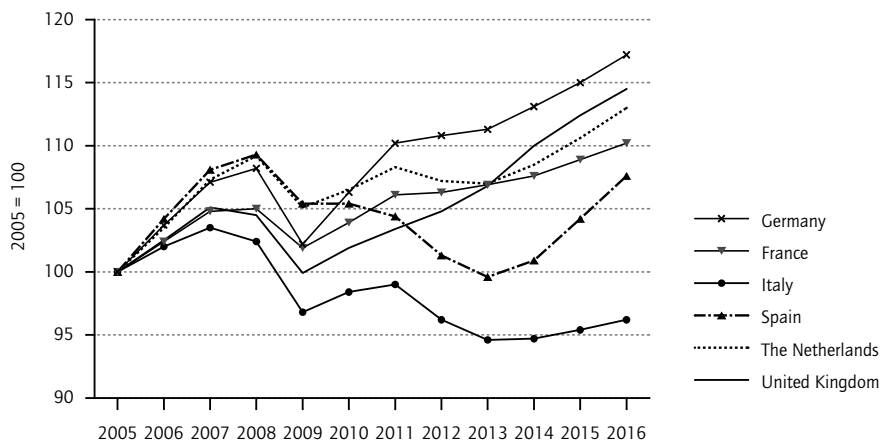
In Germany GDP has developed especially positively over the past few years. A comparable development is evident in the United Kingdom. An (inverse) correlation between the configuration of the financial system and economic growth cannot be discerned.

Academic literature on the topic also concludes that whether a financial system has a market-based or a bank-based focus will not, per se, have any measurable influence on macroeconomic growth (see for example Beck et al. 2008 and Levine 2002). An economy characterized by a large number of small and medium-sized enterprises will benefit from credit financing made available by a bank-based system. By contrast, a market-based system may be better suited to an economic system characterized by large-scale enterprises.

In Germany’s case, the bank-based system in operation proved to be particularly successful at coping with the consequences of the great financial crisis. This is a clear example of the “accuracy of fit” provided by structures that have grown organically. About 82 percent of companies active in the non-financial or ‘real’ economy in Germany are micro-entities with a workforce of nine or

Figure 2

Trend in GDP in selected European countries



Source: Eurostat.

fewer. 14 percent are small enterprises with between 10 and 49 persons; 3 percent are medium-sized enterprises with a workforce between 50 and 249; and just 0.7 percent are major corporations with a staff of more than 249 (see Statistisches Bundesamt 2017).

As a mirror image of this, decentralized banking institutions (just under 400 savings banks (*Sparkassen*) and slightly fewer than 1,000 co-operative banks (*Genossenschaftsbanken*)) constitute the predominant source of supply of credit/external funds for Germany's SMEs, the so-called *Mittelstand* (Deutsche Bundesbank 2017). The importance of decentralized financial institutions can also be gauged from the continuous increase in the lending by savings banks to non-banks throughout the financial crisis. Accordingly, Germany's *Mittelstand* did not suffer a credit crunch during any phase of what was, in fact, a series of most severe crises. Moreover, academic studies conclude that Germany's savings banks are 25 percent less cyclical than other local banking institutions (Behr, Foos and Norden 2017).

Italy and Spain—countries whose financial systems tend to be skewed toward a bank-based model—are also characterized by a comparatively high share of small and medium-sized enterprises; for example, in both employment and national value-added. Conversely, the corresponding shares in France and the United Kingdom are markedly smaller (see Schiersch and Kritikos 2014). This too reveals the importance of structures in terms of the fit between credit supply and demand.

3.2 Company needs in the context of *Mittelstand* financing

If one looks at, for example, corporate financing in Germany, the financing architecture turns out to be generally robust. Both banking institutions and the capital market play complementary roles in the field of corporate financing. However, bank loans are clearly more important than bonds as a source of borrowing. This especially applies to long-term loans; the overall volume of which corresponded to no less than 31.9 percent of the gross domestic product (GDP) in 2014.

In contrast, bond-based financing continues to play a less prominent role for German companies. The volume of short-term bonds as a proportion of GDP amounted to just 0.1 percent in 2014. The ratio of long-term bonds to GDP has admittedly risen—from 1.8 percent in 1999 to 5.1 percent in 2014. Bond issues become larger if only large-scale enterprises are considered (see Bendel, Demary, and Voigtländer 2016: 43 ff.).

Ultimately, the rather modest use of the capital market as a source of funds by smaller enterprises is based on their limited preference for such forms of financing and by fixed cost effects. In case of equity financing, if it were to go public via an IPO, a small enterprise would relinquish control to shareholders, with a lasting impact on corporate decision-making processes (see Bendel, Demary, and Voigtländer 2016: 45 f.).

Thanks to long-term relations with their local house bank, smaller enterprises have a long credit history, which enables the bank in question to frame appropriate credit terms. Anonymous financial investors are not in a position to offer smaller enterprises such precisely targeted terms because they do not have the requisite “soft” information at their disposal. On top of this, regionally oriented banking institutions have local knowledge at their fingertips, for example about entrepreneurs or production processes. In this context, geographical proximity makes it easier for “soft”, confidential, information to be passed on (see Gärtner and Flögel 2013).

A special feature, which also plays a role in the Capital Markets Union project, involves corporate startups whose business models are geared toward rapid growth. As a rule, financing these involves a large proportion of equity capital. Debt financing is relatively rare at such startups, frequently limited to the financing of operating supplies or concrete investment objects. Such an approach satisfies the criteria of risk-adequate financing, as financing institutions are, for the most part, unable to sufficiently assess the risks entailed. Financing requirements are covered by family and friends in the startup's earliest infancy (seed phase); business angels and institutional venture capital investors come on board in later growth phases.

3.3 Investment preferences of private households

Along with the real economy, private households decisively affect the development of any given financial system. This is an endogenous development, responding to the environment of incentives and institutions. The attitudes and needs of citizens, their risk propensity, and their preference for particular investment vehicles are major determinants influencing the (endogenous) configuration of the respective financial system. Risk-averse societies tend to have bank-based financial systems, whereas capital market-based systems are more likely in societies with a greater risk appetite (see on this count Kwok and Tadesse 2006). The provision of insurance against income risks—unemployment, health, and old-age/longevity—plays a crucial role. In pay-as-you-go systems, individuals do not have to care too much individually to be able coping with such risks. Accumulating a buffer to draw on is less of a concern. In other words, the appetite for risk is not genetic, it is endogenous.

In Germany's case, for instance, it is a fact that even when confronted with low interest-rates phase, a mere 10 percent of German citizens reported in 2016, being on the look-out for higher interest rates on their financial investments and being prepared to accept somewhat higher risks in the process. Indeed, this figure has actually fallen in recent years: in 2014, 23 percent of those questioned ticked this box; in 2015, 14 percent did so. Accordingly, security was the criterion mentioned most frequently in the 2016 survey of the financial investment behavior of Germans. The security of an investment vehicle was one of the three most important criteria for 57 percent of the German citizens questioned—a seven-percentage point increase relative to 2015 (see Deutscher Sparkassen- und Giroverband 2016).

The responses to the question as to which products are best suited for asset-planning and wealth-creation purposes similarly reveal that equities and investment funds consistently rank in the lower reaches, with only about 10 percent of German citizens showing a preference for either of these investment vehicles. This suggests that securities are only considered to be an option by a selected group of investors (see Deutscher Sparkassen- und Giroverband 2016).

4 Varieties versus Europeanization—a question of demand

4.1 For a classification of the Capital Markets Union

It is crucial for the economic development and for the development of our society in general to provide room for entrepreneurial creativity. New enterprises identify both new ideas and new market opportunities. They promote competition and, thus, dynamic trends in a country's port-

folio of companies. This renewal process is essential to safeguard the future viability of our economic system.

However, it is not only business founders, but also existing companies, that are important agents shaping the process of change and future trends. Both industry and society need to be even more open to innovation than has previously been the case. By way of example, digitalization is capable of imparting fresh stimuli, especially to existing industrial companies, leading to a possibly radical but, at the same time, successful transformation of corporate business models. Thus, economic agents need to be provided with framework conditions today that will spur their activity as entrepreneurs. In 2014, Germany's Federal Ministry for Economic Affairs and Energy (BMWi) provided a good example: its program "INVEST- Grant for venture capital" created incentives for wealthy private individuals to commit capital to help finance young, innovative enterprises.

The Capital Markets Union project creates a further important stimulus to test and revise the viability of existing financing structures. It is also of importance to promote the capital market in its capacity as a door-opener to other forms of financing. However, such promotion should not disregard the needs of corporate start-ups and established companies, any more than it should disregard the investment wishes of citizens. Undesirable distortionary effects in the economy as a whole would be the consequence if capital market-based business financing and certain market segments were to be promoted one-sidedly. If that were the case, a laudable attempt to boost efficiency would result in a proliferation of inefficient structures.

Measures implemented in connection with the aspired-to Capital Markets Union must not in any way weaken the classic bank loan, bypassing the needs of companies. The long-term reliability of a bank-based financial system ensures security for domestic companies and must be preserved. Any developments that would impair long-term bank lending should, therefore, be looked at carefully and critically.

The European Commission's current initiative to initiate consultations on the action plan to build a Capital Markets Union is welcomed. Many of the initiatives underlying the proposed Capital Markets Union have either not yet been implemented or have not yet come into force, so it is obvious that their interdependencies and effective impact on the market cannot yet be evaluated.

What is important in the first instance is a critical review of existing financial market regulation. The objective should be an integrated regulatory framework, avoiding regulatory duplication and inconsistencies, while taking account of cross-references to the respective regulations. There is a temporal aspect here too: going forward, adequate and legally sound implementation periods should ensure that legislative acts pertaining to the various stages are properly coordinated, with enough time to put the new regulations into practice in a timely manner.

Many EU directives that have been promulgated recently—the Mortgage Credit Directive (MCD), for example, or the Payment Services Directive (PSD)—already address the goals referred to, namely keener competition with regard to "better choice", pricing, and transparency. Additional, more extensive regulation of markets would not be expedient.

The confidence of "small investors" in capital markets is an important consideration that was rightly referred to in the commission's consultation document. Such confidence needs increasing during the construction of the Capital Markets Union. The fact is, however, that various

European statutory provisions constitute an obstacle to the latest regulations seeking to broaden the investor base. They are throwing additional hurdles in the path of retail investors, dissuading them, in a worst-case scenario, from investing in the capital market. For example, the statutory provisions governing the reporting of costs and charges pursuant to MiFID II and PRIIPs are not properly harmonized.

The statement in the commission's consultation document (European Commission 2017: 6) that market-based finance is needed to *complement* bank lending is very much welcomed. This is because bank loans remain one of the principal financing sources for the vast majority of European companies. This principle holds particularly true for small and medium-sized enterprises (SMEs) (see Masiak, Moritz, and Lang 2017: esp. 24). Therefore, it continues to be essential that corporate financing by financial institutions is organized in such a way that financial market stability is safeguarded without restricting lending to companies. It is also very important to align banking regulation with the needs of small and medium-sized enterprises.

For most SMEs, capital market financing is not an option due to the onerous requirements (for example, minimum volumes and reporting obligations) as well as the costs that are involved. Arbitrary promotion of capital market financing at the expense of the banking industry poses the threat of overlooking corporate needs as well as of aiding and abetting the development of shadow bank activities.

4.2 Preserving proportionality in banking regulation

Especially in view of the significance of smaller, regionally anchored, financial institutions when it comes to financing small and medium-sized enterprises, it is imperative that the financial institutions in question should not be overburdened with inappropriate regulation. Certainly, the internationalization of banking regulation is a development that is, in principle, welcomed. However, it would be wrong to turn a blind eye to the resulting dangers. These dangers relate above all to rules requiring "one size fits all" uniformity. It is important to take a critical view of regulatory initiatives that are geared almost exclusively to the structural features of major banks and capital market-based financial systems.

International regulators need to take greater account of the needs of small and medium-sized enterprises. The rules should be written in a significantly more differentiated way and should factor in systemic relevance. Greater account needs to be taken of the economically vital tasks performed by banking institutions and of the classic business model involving deposit-based lending.

Apparently, regulators at times fail to recognize that, without proportionality, regulation generally results in higher fixed costs. Consequently, small and medium-sized financial institutions bear a disproportionate burden. Regulation should, therefore, differentiate according to the business model, the inherent systemic risks and the activity radius of the bank in question. What we need in Europe is a "small and simple banking box".

Greater differentiation does not mean lower standards on a broad scale; it means that not all rules have to apply to everyone, at least not with the same degree of complexity. Relief needs to be forthcoming, especially in the administrative area. In general, regulation should make far greater use of *de minimis* limits and thresholds. The "Basel III" standards should only apply in full to internationally operating banking corporations and to those utilizing business models that

are more risk-prone and, hence, potentially creating systemic externalities. In fact, that was the initial idea behind Basel: it was meant to address financial stability problems that might arise from large, internationally exposed banks.

Banking regulation is not an end in itself, but rather serves, first and foremost, to safeguard financial market stability and to cope with negative external effects pertaining to systemic relevance. Such regulation must not lead to a situation in which regionally-oriented banking institutions, those with a limited perimeter, are no longer able to perform their important societal function. This function includes providing services, including in remote rural regions, to guarantee the financial inclusion of less affluent sections of the population as well as to provide highly efficient access to funds to the *Mittelstand* by means of relationship lending; thus lending that involves close long-term ties, both with new startups and with more traditional small and medium-sized enterprises (see Petersen and Rajan 1995). If regulation endangers small and medium-sized financial institutions, an immediate consequence will be that the capacity of these entities to perform their role in the economy and in society will be undermined.

5 Conclusion

The *Mittelstand* is one of the most important engines of innovation and technological progress in Europe and is rightfully held in high regard internationally. However, small and medium-sized enterprises need to reposition themselves continually if they are to remain competitive in the future. The framework conditions governing business activity need to help to better promote small and medium-sized entities. This is as true for the real economy as it is for the banking industry. The future viability of our economy depends to a crucial extent on how successfully company formation and growth are fostered. This also has a decisive bearing on our development as a society.

One objective of the Capital Markets Union project is to strengthen innovation and especially to provide more opportunities on a pan-European basis for entrepreneurs with bright ideas and growth companies that previously had no access to funding (European Commission 2015). This objective is most welcome, although, it should be borne in mind that excessive support of startups could lead to long-term dependency on public subsidies.

In general, excessively subsidized, publicly supported criteria-based access to funds bear the risk of distortion effects. They can lead to an excessive economic steering function. This is also the case for excessively subsidized, publicly supported criteria-based access to funds for capital market-based financing—of the start-up scene in particular. They can quickly lead to the over financing of companies that would otherwise be unable to survive in the market on their own. In such an environment, there is a risk of business ideas entering the market thanks to financial promotion, which would not have otherwise been viable: in such cases, promotion artificially places companies in a position where they are out of their depth. Over-valuations of this kind, not based on the market laws of supply and demand, materialize far more easily in market-based structures. The aim must be to promote companies with a solid capacity to add value and grow, keeping a close eye on the framing of individual incentives so as to ensure that the new companies operate efficiently.

Small and medium-sized enterprises are frequently successful by virtue of their tried-and-tested specialization and niche strategies. Above all, local financial institutions, such as savings banks and co-operative banks, are synonymous with business model diversity and with market proximity based on decentralized structures. In an internationally interconnected economy, such banks enable a meaningful, highly granular allocation diversification of risks. By contrast, excessive regulation inhibits the ability of banking institutions to support the real economy with loans.

Since the financial crisis, a debate has taken place on a European level about whether—and, if so, how—to take account of the proportionality principle in banking regulation, as European banking regulation currently follows a “one size fits all” approach. In keeping with this, all financial institutions are obliged to adhere to uniform minimum requirements, only marginally mitigated by the proportionality principle. A better—i. e. more efficient—regulatory approach, based on the business model, size, and risk profile of the bank concerned would be more appropriate. The rigid regulatory provisions currently in force especially hamper the business activity of smaller, local banking institutions.

The objective must be to create a stable and sustainable financial system, providing all households and companies with appropriate access to financial services. This also implies that policies should be system-neutral. Access is key to sustainable and equitable economic growth and higher employment. In this context, financial inclusion is the basis for stable bottom-up creation of wealth enabling participation for all. With this in mind, local, regionally operating banks can look back on a long success story as responsible institutions catering to the needs of all sections of the population.

References

- Beck, Thorsten, Asli Demirgüç-Kunt, and Vojislav Maksimovic (2008): Financing patterns around the world: Are small firms different? *Journal of Financial Economics*, 89, 467–487.
- Behr, Patrick, Daniel Foos, and Lars Norden (2017): Cyclicity of SME lending and government involvement in banks. *Journal of Banking and Finance*, 77, 64–77.
- Behr, Patrick, Lars Norden, and Felix Noth (2013): Financial constraints of private firms und bank lending behavior. *Journal of Banking and Finance*, 37, 3472–3485.
- Bendel, Daniel, Markus Demary, and Michael Voigtländer (2016): Entwicklung der Unternehmensfinanzierung in Deutschland [The trend in corporate financing in Germany]. *IW-Trends* 1.2016, 37–54.
- Deutsche Bundesbank (2017): Monthly Balance Sheet Statistics. Downloadable at: www.bundesbank.de/Navigation/DE/Statistiken/Zeitreihen_Datenbanken/Banken_und_andere_finanzielle_Institute/banken_und_andere_finanzielle_institute_details_value_node.html?https=1&https=1&https=1&listId=www_s100_bh_105_01&tsId=BBK01.OJH981 (15.03.2017).
- Deutscher Sparkassen- und Giroverband (2016): Vermögensbarometer 2016.
- European Commission (2015): Action Plan on Building a Capital Markets Union.
- European Commission (2017): Consultation Document Capital Markets Union Mid-Term Review 2017.
- Gärtner, Stefan, and Franz Flögel (2013): Dezentrale versus zentrale Bankensysteme? Geographische Marktorientierung und Ort der Entscheidungsfindung als Dimension zur

- Unterteilung von Banksystemen [Decentralised versus centralised banking systems? Geographical market orientation and the decision-making location as a dimension in banking-system classification]. *Zeitschrift für Wirtschaftsgeographie*, 57 (3), 105–121.
- Kotz, Hans-Helmut, and Dorothea Schäfer (2013): Rating-Agenturen: Fehlbar und überfordert. *Vierteljahrshefte zur Wirtschaftsforschung*, 82 (4), 135–162.
 - Kwok, Chuck CY, and Solomon Tadesse (2006): National culture and financial systems. *Journal of International Business Studies*, 37, 227–247.
 - Levine, R. (2002), Bank-Based or Market-Based Financial Systems: Which is better? *Journal of Financial Intermediation*, 11, 398–428.
 - Masiak, Christian, Alexandra Moritz, and Frank Lang (2017): Financial Patterns of European SMEs Revisited: An Updated Empirical Taxonomy and Determinants of SME Financing Clusters. EIF Research and Market Analysis Working Paper 2017/40.
 - Petersen, Mitchell A., and Raghuram G. Rajan (1995): The Effect of Credit Market Competition on Lending Relationships. *Quarterly Journal of Economics*, 110, 406–443.
 - Sachverständigenrat [Germany's Council of Economic Experts] (2015): Annual Report 2015/16. Focus on Future Viability.
 - Schiersch, Alexander, and Alexander Kritikos (2014): Kleine und mittlere Unternehmen: Stütze der gewerblichen Wirtschaft in Europa [Small and medium-sized enterprises: pillars of European trade and industry]. DIW Wochenbericht Nr. 13/2014, 277–287.
 - Statistisches Bundesamt [Federal Statistical Office] (2017): Kleine & mittlere Unternehmen (KMU), Mittelstand: Unternehmen, Tätige Personen, Umsatz, Investitionen, Bruttowertschöpfung: Deutschland, Jahre, Unternehmensgröße [Small and Medium-Sized Enterprises (SMEs), Mittelstand: Companies, employees, turnover, investment, gross value added: Germany, years, company size], downloadable at: www-genesis.destatis.de/genesis/online/link/tabelleErgebnis/48121-0001 (15.3.2017).