

Central Bank-Driven Mispricing_4

Loriana Pelizzon · Marti G. Subrahmanyam · Davide Tomio · Jun Uno

How Real Estate Transfer Tax Prevents Beneficial Transactions_10

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Deepening of the Economic and Monetary Union: French and German Cooperation Paves the Way for Reform_14

Jörg Kukies

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About SAFE

The Research Center SAFE – “Sustainable Architecture for Finance in Europe” – is a cooperation of the Center for Financial Studies and Goethe University Frankfurt. It is funded by the LOEWE initiative of the State of Hessen (Landes-Offensive zur Entwicklung wissenschaftlich-ökonomischer Exzellenz). SAFE brings together more than 40 professors and just as many junior researchers who are all dedicated to conducting research in support of a sustainable financial architecture. The Center has two main pillars: excellent research on all important topics related to finance; and policy advice, including the dissemination of relevant research findings to European decision makers from the realms of politics, regulation and administration.

In order to promote a fruitful exchange with interested parties from politics, academia, business and the media, SAFE issues a newsletter on a quarterly basis. This aims to provide an overview of the Center’s ongoing research and policy activities. The SAFE Newsletter succeeds the House of Finance Newsletter, which was published between 2009 and 2012.

SAFE is based at Goethe University’s House of Finance, however extends beyond by drawing on scholars from other parts of Goethe University as well as from fellow research institutions. The Center builds on the reputation of the House of Finance institutions, serving as an interdisciplinary think tank on the issue of finance.

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Editorial



Christian Schlag

SAFE Program Director,
Research Area “Financial Markets”

Exchange-traded funds (ETFs) have become a significant element of today’s capital markets. Invented in the US back in the 1970s, ETFs are today very popular among both private and institutional investors, mainly due to their simplicity, low management fees, and up-front loads. However, although the advantages of ETFs are widely acknowledged, a debate has recently started focusing on various potential risks associated with them.

These financial products allow an investor to trade a basket of assets in a single transaction. Many ETFs replicate a major stock market index, e.g. the S&P 500 in the U.S. or the DAX in Germany. There are two major types: first, those physically holding the stocks included in the index; secondly, those synthetically replicating the index return using derivative instruments like swaps. The popularity of these instruments also manifests itself in the large (and increasing) assets under management (AUMs) of index-based ETFs, with the biggest having AUMs of around 245 billion dollar for the S&P 500 and 6.9 billion euro for the DAX. Recent estimates say that the total AUM for ETFs on these indices exceeds 500 billion dollar and 20 billion euro, respectively. The share of the total market capitalization of the S&P 500 held by ETFs is estimated at around 5 percent, and the figure for the DAX is probably similar.

So what about these potential risks? Of course, just like the index itself, the ETF will always be subject to volatility. That is simply a standard investment risk. The fact, however, that large amounts of money have flown into ETFs makes the providers (e.g. Blackrock) powerful players in the economy. For instance, they often hold substantial voting rights in the companies included in an index. This gives cause for concern inasmuch as, when an ETF holds shares in two or more firms in the same sector, this might reduce competitive pressure if the provider votes against corporate actions in one firm that might reduce the profits or the stock price of the other firm.

While this issue is primarily relevant to ETFs which replicate an index physically, those funds generating index returns synthetically have to enter into a large number of swap transactions, creating substantial borrowing and lending connections to other market participants. Although such bilateral transactions are now much more closely scrutinized than before the financial crisis, the risk of a potential systemic shock in times of severe market stress can never be eliminated with certainty. There is another potential risk: since ETFs based on a given index naturally tend to hold very similar asset positions, outflows during market downturns might exacerbate adverse price effects. This is because the same stocks are sold at the same time in large amounts. This negative price pressure might spread to other stocks and even to other asset classes, ultimately causing a severe systemic event.

As of now, it is not yet clear how relevant these concerns are. We need more research to reach to a better understanding of the potential risks associated with ETFs, and these issues are high on the SAFE research agenda.

Kind regards,
Christian Schlag

Central Bank-Driven Mispricing



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In recent years, several central banks have made use of quantitative easing (QE), a non-standard operation targeting the bond market. In terms of their magnitude and breadth of coverage, these interventions are unprecedented in the history of central banking. In this study, we analyze whether QE conducted by the European Central Bank has been market neutral and what effect the bond purchases have had on the bonds' relative pricing. Focusing on Italy and Germany, we find that the mispricing between cash bonds and futures contracts was as high as 45 cents per 100 euro worth of bonds.

After the Great Recession and the ensuing European sovereign bond crisis, central banks have expanded their traditional toolbox, developing new, non-standard open market operations targeting wide swaths of the bond market. These operations are generally referred to as quantitative easing (QE). Starting in March 2015, the European Central Bank (ECB) has been purchasing sovereign bonds for a changing amount

in the context of its Public Securities Purchase Program (PSPP). Other central banks have also used these non-standard-operations, such as the Bank of Japan, the Federal Reserve System, or the Bank of England.

Mostly, the principal objective behind open market operations is to influence interest rates and, more generally, the cost of money in the economy. Notwithstanding, they are susceptible to having “unintended consequences”, affecting the proper functioning of the markets that they are targeting. In an effort to mitigate the unwanted effects, central bank interventions such as the ECB's QE are engineered to be “market neutral”. As such, they aim to preserve the price discovery mechanisms at play in the functioning of financial markets, keeping them free from mispricing or arbitrage preserving the law of price. The ECB intended for the bond purchases to shift the absolute level of interest rates – as the central bank explicitly aims at detaching them from the “natural” level they would have been at had the intervention not taken place – but without affecting its relative level across assets.

The effect of the purchases on the relative pricing of bonds

In this, we investigate the question whether the actions of the ECB have indeed been market neutral. Furthermore, we analyze the effect the purchases have had on the bonds' relative pricing. For that reason, we focus on the relationship between the cash bond and the corresponding futures contract.

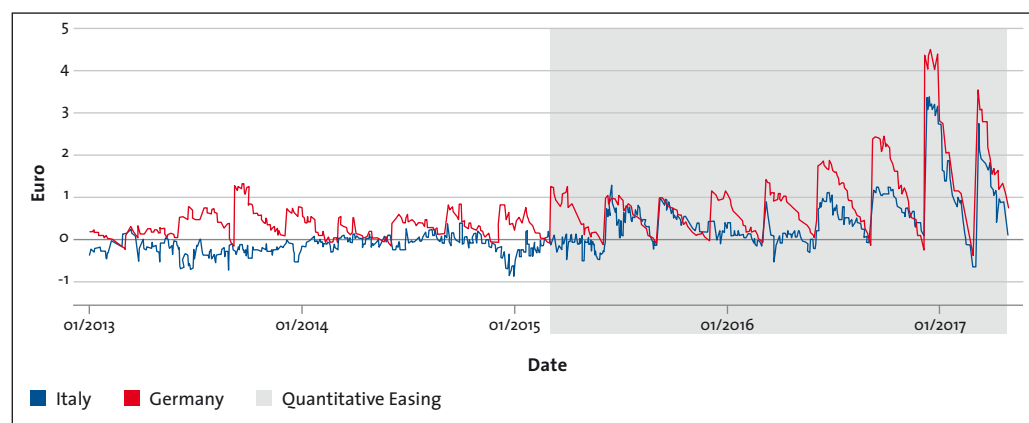
We employ high-frequency data on the prices and traded quantities of eurozone bonds and futures contracts for the 2013–2017 period, which encompasses three years of QE intervention by the ECB (the calendar years 2015 to 2017). During this time, the ECB purchased 50 to 80 billion euro worth of sovereign bonds a month. We identify mispricing opportunities between futures and the underlying bonds for contracts written on Italian BTP bonds (Buoni del Tesoro Poliennali, or Treasury Bonds) and German Bunds (Bundesanleihen, or Federal Bonds), splitting the focus onto two countries in order to confirm that our findings are not driven by country-specific idiosyncrasies.

The ameliorative effects that unconventional monetary policy interventions had on the absolute level of interest rates have been the object of extant academic literature (for example, Krishnamurthy and Vissing-Jorgensen, 2011). A key concern has been establishing a counterfactual: Had the central bank not intervened, what would the absolute level of the bond yields have been? In contrast, we have no need to explicitly define a counterfactual to show the unintended consequence that QE had on the relative level of interest rates since the futures contracts serve as a direct metric for comparison. We investigate whether, by purchasing only one category of assets (i.e. cash sovereign bonds) and focusing on lowering the absolute level of

interest rates, the ECB displaced relative interest rates across assets, in particular decoupling the cash bond markets from its futures market counterpart. Testing for deviations in relative prices only requires the presence of an arbitrage such as the one we consider in this paper.

A concern for central banks and regulators

We find that the mispricing between cash bonds and futures contracts caused by QE was as high as 45 cent per 100 euro worth of bonds, corresponding, for example, to over three-quarters of a billion euro of market dislocation in the over 200-billion-euro market for German and Italian futures contracts, in each quarter (see figure).



Mispricing between Bonds and Futures: This figure shows the time series of the mispricing between the futures contract and its underlying bond, for Germany (in red) and Italy (in blue). The mispricing is calculated at a five-minute frequency averaged across the day and is calculated in euro for 100 euro of bond face value.

The mispricing we observe should concern central banks and regulators for two reasons. Firstly, central banks value financial markets as sources of information (Cœuré, 2015): The market for interest rates should be informative, and it is in the policymakers' interest to ensure that market participants agree on what the correct interest rate is. Even a small amount of uncertainty regarding the level, slope, and curvature of the yield curve would translate into substantial capital at risk, as eurozone sovereign bonds have an outstanding amount of 10 trillion euro, and are widely used as collateral in bond spot and derivative markets based on their having open interests that measure in the billions. Secondly, governments and central banks are sensitive to welfare considerations: the ECB's intervention's effect of widening the gap between the prices of the two securities and allowing traders to profit from selling the more expensive security – and contemporaneously perfectly hedging it by buying the cheaper security – is tantamount to a direct transfer from tax-payers to arbitrageurs (i.e. financial institutions).

We postulate that the mispricing is the result of two contemporaneous events: First, the buying pressure and market dislocations following the ECB's bond purchases, and second, the regulatory capital constraints, implying non-negative

minimum required returns on riskless trades, because of the regulatory capital they employ.

In order to avoid these effects, central banks should pay attention to markets connected by arbitrage (e.g. the futures and other derivatives markets) when conducting outright asset purchases. We suggest that central banks achieve market neutrality in their operations by purchasing a broader set of assets, which can include cash bonds, but also futures contracts and, in general, interest rate derivatives.

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Households Adjust Expenditures around their Largest Outflows



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Goethe University & SAFE

How spending responds to income receipt is well researched. For example, Gelman and co-authors (2014) report that consumption expenditure is sensitive to the timing of income receipt, even if paychecks are regular and anticipated (often referred to as “pay-day effects”).

To the best of my knowledge, I am the first to analyze the role of large, regular outflows in household spending. I exploit how non-durable spending responds to the timing of housing payment, as rent or mortgage payments are typically the largest of fixed outflows of most households. This kind of expenditure is called “consumption commitments”. The idea is that households postpone other forms of spending until after the housing payment is made a sensible budgeting strategy for liquidity-constrained households. This interaction between fixed expenditure and liquidity management is a source of relevant heterogeneity in explaining consumption responses.

In the empirical analysis, I document how the timing of consumption commitments affects other spending. It is important to stress that

this is not solely a low-income phenomenon, concentrated around renters; middle-class home-owning households owing mortgage payments behave in the same way. Therefore, a large number of households across the income distribution behaves de facto as if facing liquidity constraints. I use data from US Consumption Expenditure Diary Survey (CEX) from 1986 to 2011, which provides data mainly on high-frequency consumption categories like food or personal care, and also collects information on the timing of housing payments. The data shows that many households have to time a large monthly outflow with a different frequency of wage receipt. Almost all households make a rent or mortgage payment once a month, whereas 58 percent receive a pay-check on a bi-weekly basis, 32 percent are paid weekly, and 10 percent once a month.

The timing of housing payment affects other expenditures

From the CEX data, I categorize food at home, food away, personal products and services, public transportation and gasoline, and smoking supplies into non-durable spending. For the

construction of expenditure categories, I followed, among others, Evans and Moore (2012).

The separate regressions for weekly, biweekly, and monthly paid households show that, on the day of the housing payment and in the days after, other non-durable expenditures increase (see the Figure). The spending patterns are very similar for households with weekly, biweekly, and monthly income streams and suggest that non-durable spending is strongly related to the timing of monthly housing payment. Specifically, non-durable spending increases approximately 48 percent for households paid weekly, 41 percent for those paid biweekly, and 46 percent for those paid monthly. The size of the effect amounts to a little less than half a day’s worth of spending on the day of the housing payment. Although Evans and Moore (2011) document a “first of the month effect”, analyzing the days after the housing payment shows there is no clear pattern around the first of the month visible.

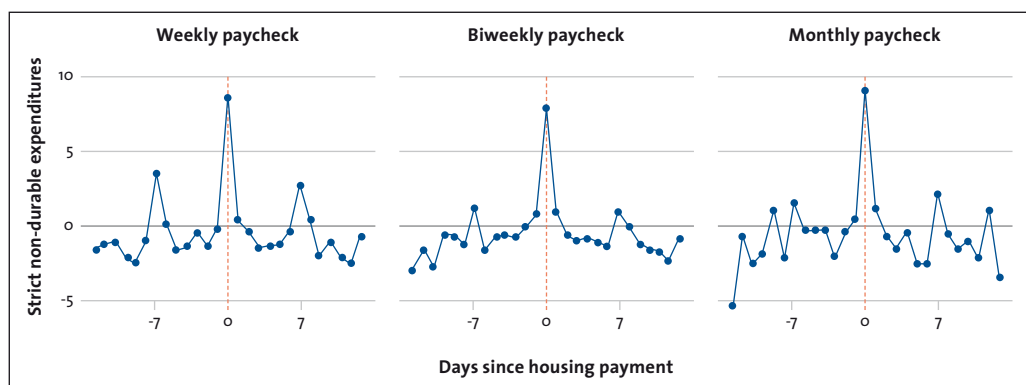
Furthermore, I address observable heterogeneity and split the sample into the lowest and the

A variety of studies conclude that households’ consumption patterns correlate to income. However, households’ liquidity is not affected only by income, but also by large, frequent outflows. The largest outflow is usually a rent or mortgage payment. I examine consumption patterns around the timing of the housing payment made by households. My empirical findings suggest that if households face liquidity constraints, they postpone other non-durable expenditure in order to have enough liquidity to make the housing payment.

highest quartile for the budget share of housing payment, into the lowest and highest quintile for household income, and into renters and mortgage payers. While the difference between households with a high and a low budget share of housing is relatively small (which could be due to noisy data), the regression shows that renters have a stronger spending response with an increase of 51.5 percent than homeowners (+43.9 percent); the differences could indicate more severe liquidity constraints for renters. Further, the spending effect to the timing of consumption commitments is with 54.7 percent larger for households with incomes in the bottom quintile than for households in the top income quintile (+41.8 percent).

Households respond to extra liquidity

In the second part of the analysis, I exploit some quasi-experimental variation in household liquidity. Therefore, I focus on households who receive income in a biweekly pattern. Receiving two paychecks per month results in paying ten housing payments with two paychecks but two with three paychecks. I compare the episodes with the “extra” paycheck with the ones where the households only receive two for the housing payment. First, I look at the consumption response to the third paycheck and then compare the days after the housing payment of the episodes with two and with three income payments. The extra cash should alleviate the consumption pattern if liquidity constraints are the main explanation.



Daily spending around housing payment: The figure shows the increase of non-durable spending for households receiving weekly, biweekly, and monthly paychecks. “Time 0” is the day of the housing payment. Regardless of the frequency of paycheck receipt, non-durable spending increases the most on the day of the housing payment. For households paid weekly the expenditures increase is about eight USD, around seven USD for households paid biweekly, and about eight USD for those paid monthly. All regressions control for the day of the week, the day of the survey, and week of the month.

I find that biweekly paid households increase non-durable spending by 10.4 percent in the 14 days after receiving a third check. The consumption response to the extra payment suggests that many households do indeed face liquidity constraints. Moreover, I find that households in which housing forms a larger share of budget reduce non-durable spending in the week after the housing payment in those weeks in which they receive extra liquidity. This points to an important interaction between liquidity constraints and the budget share of consumption commitments in the household budget for the timing of non-durable spending. Due to potential issues of misclassification, these results should not be over-interpreted, but certainly do present a potential impulse for future research.

To sum up, I find that the timing of housing payments matters for the timing of other expenditures. This novel finding implies that the consumption response to income receipt can be confounded by the timing of large, fixed expenditures. In the short-run, both income receipt and payments of consumption commitments matter for the liquidity of a household. As a consequence, households facing greater liquidity constraints, as well as households in which consumption commitments form a larger budget share, have a stronger need to manage liquidity. The idea that both elements of a household’s budget constraint matter (i.e. income and

consumption commitments) could be a relevant source of consumer heterogeneity, and may provide further insights into consumer response to fiscal and monetary policy. One potential policy instrument which could be explored in this context is that of providing housing subsidies in a recession, which could prove more effective in stimulating consumption.

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The paper “Explaining Intra-Monthly Consumption Patterns: The Timing of Income or the Timing of Consumption Commitments?” was published as SAFE Working Paper No. 237 and is available at: <https://safe-frankfurt.de/household-expenditures>

“Financial Markets Play a Role for Hours Worked”



Nicola Fuchs-Schündeln
Goethe University
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In your work, you have focused on the relationship between working hours and income. Why has there been so little research into this so far?

For one, it is difficult to measure working hours across countries. In our study, we collected microdata sets for 80 countries that have at least 5,000 observations and are representative. For 49 of these countries comparability is particularly high, for example because the surveys all cover the whole year. This is particularly important in poor countries: The harvest time is high season, for instance, but in other periods, there is less work to do. We separated these 49 countries into the poorest third, the middle third, and the richest third worldwide.

People in poor countries work longer than people in rich countries. What does that mean?

The difference is about 50 percent for people over the age of 15. This means that people in rich countries not only have higher welfare because they can consume more goods thanks to a higher gross domestic product, but also have more leisure time. Taking this into account, the wel-

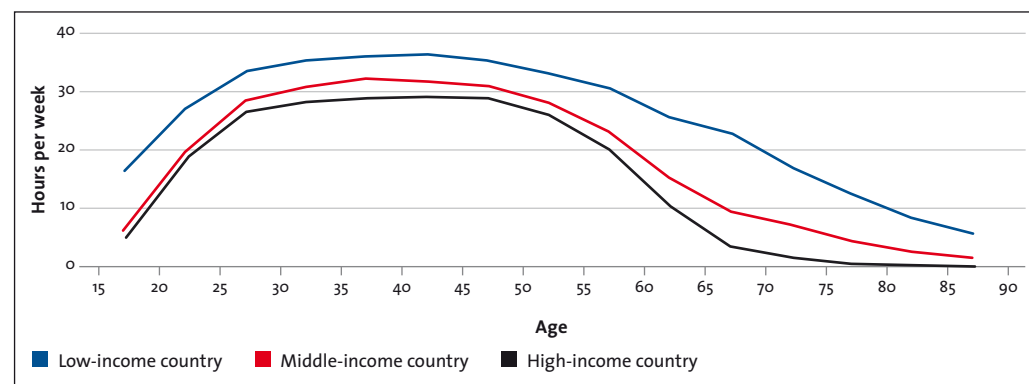
fare gap between rich and poor countries increases by 60 percent. This was a surprise for us. There were economists who suspected that in poor countries the number of working hours was lower and that this could be one of the reasons for the poverty of these countries. The opposite is the case. The decline in working hours with the level of development can also be observed over time. There are good time-series data for the US, where the average working time per week has fallen by four hours over the past 100 years. This is consistent with the differences we see today between middle-income and rich

countries. So the same pattern can also be found over time in the US. This suggests that fundamental development factors are at the root.

What are the consequences of this?

This matters for example for the measurement of labor productivity: if we measure productivity as gross domestic product per hour worked, rather than per worker, the differences between rich and poor countries are even greater than previously assumed. In rich countries, labor productivity is 17 times higher than in poor countries.

In this interview, Nicola Fuchs-Schündeln, Professor of Macroeconomics and Development at Goethe University since 2009, talks about the relationship between working hours and income in an international comparison. Fuchs-Schündeln previously taught at Harvard and was awarded the Leibniz Prize of the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG) last year.



Average hours per adult over the life cycle: The pattern of decreasing hours by country income is present at each single age group.

What do you know about hours worked on the individual level? Do poor people work more hours within a country than rich people?

In almost all countries, we find that people work less as hourly wages rise. However, this relationship also depends on the development stage: in the richest countries, the relationship is reversed. There, people with higher wages work more. We are dealing with an income effect and a substitution effect. Poor people work a lot to achieve a minimum level of consumption. If their hourly wages rise, the pressure to work and the number of working hours decrease – that is the income effect. The substitution effect makes work more attractive because there is more money to earn. When the country or individual gets richer, the income effect weakens. The state could also play a role. If you are poor and have low productivity, in many countries there is nothing left to do but work hard to survive. In rich countries, the welfare state takes care of people with low productivity, i.e. there is state insurance. In the US, by the way, the relationship between individual hourly wages and working hours has again changed from negative to positive over time.

What is the significance of gender and age?

There are similar patterns across countries. On average, both men and women work more in poor countries than in rich ones. However, in all

countries, men work more than women do. It is also true for all age groups that working hours are higher in poor countries than in rich ones (see figure). Nevertheless, the differences are greater for the age group in which people retire in rich countries. The same applies to younger people because they are still going to school in rich countries but are already at work in poor countries. Moreover, in poor countries, only about a quarter of the population is in employment; many are self-employed for lack of an alternative – because of a low level of education, for instance. They often live in rural areas, cultivate crops, or offer simple services, and work significantly fewer hours than employees do. In rich countries, this difference does not exist.

What could be the reason for that?

Our hypothesis is that these people do not have access to the formal labor market, nor to factor markets. They lack funding, for example for loans to grow their business and employ others. The lack of developed financial markets could mean that these people can only put their own savings into their business, and as this is usually a small amount of money, their businesses cannot grow. In these circumstances, it often does not make any sense to work longer hours. If, for example, a farmer has only a small field and can't borrow money, he will only be able to profitably work a certain number of hours there.

We know that poor people work more if they are given capital. Financial markets also play a role in the number of hours worked.

Do you think that digitalization will further reduce the number of hours worked?

John Maynard Keynes once predicted that, 100 years from the time of writing, people would hardly work anymore. He was wrong about that. Although the number of hours worked has fallen, the curve of decline is flattening out; I do not think digitalization will drive us out of the market. However, it could be that progress will allow us to consume more, including more leisure time.

Could factors such as culture also be significant for the differences between countries?

Do not think cultural differences are the main reason for the fundamental differences in working hours. However, they can play a role. For example, there are signaling effects: If everyone around me is working a lot, I will also spend many hours in the office in order to send a positive signal – no matter how productive this is. I do not think, however, that such factors can explain the big differences between poor and rich countries.

Recently, you received an ERC Consolidator Grant that enables new research projects. What

are the questions which you will pursue?

We want to understand better where differences in the labor market come from. Why do people behave differently in the labor market? Moreover, why do we sometimes see different labor market successes, even when people behave similarly? We will be analyzing the situation in poor and rich countries and the differences in labor market behavior and outcomes between men and women. With regard to the latter, we analyze the consequences of maternity leave and maternity policies, among other things. The European countries, in particular, have relatively far-reaching maternity protection and parental leave regulations. These can have unintended effects, for example in making it more risky or costly for employers to employ women. The question is how great these unintended effects are, and whether there could be better policies to increase equal opportunities. This is important, because it is not about abstract employment effects, but about people's well-being. Labor income, influenced by behavior and success in the labor market, is probably the most important source of inequality in society.

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How Real Estate Transfer Tax Prevents Beneficial Transactions



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The explosion of tax rates in most German states has brought the real estate transfer tax (Grunderwerbsteuer) into the spotlight, not only in the political but also in the economic debate. In this SAFE Policy White Paper, we offer a broad discussion of the side effects and problems connected to the tax. Furthermore, we explain how the adjustment of the real estate transfer tax towards a kind of deferral model may improve the performance of the real estate market.

Since 2006, the federal states in Germany have the right to set the rate for the real estate transfer tax themselves. Only two federal states, Bavaria and Saxony, have maintained the old nationwide tax rate of 3,5 percent, with all other federal states having increased their rate up to a maximum of 6.5 percent (see figure).

Generally, as a kind of a financial transaction tax, the real estate transfer tax drives a wedge between the potential buyer's willingness to pay and the potential seller's reservation price, effectively preventing beneficial transaction. More

specifically, this means that transaction taxes can decrease the spatial flexibility of labor markets, as relocating the workplace is connected to additional transaction costs for homeowners. In addition, the tax prevents families whose space requirements have fallen from selling their homes to other families in need of more space. The tax creates a lock-in situation which tends to result in suboptimal use of housing and aggravates the situation in tight housing markets. Households who anticipate frequent relocations have an incentive to avoid the tax through tenancies, which therefore artificially lowers the rate of home ownership.

On the other hand, one of the advantages of the real estate transfer tax is that it does not apply periodically to households' assets, which implies low levying and compliance costs. Furthermore, the notarized purchase price provides a market-oriented valuation, sidestepping the high valuation costs which haunt wealth and inheritance taxes.

The real estate transfer tax is not the only tax levied on real estate in Germany. There is also a

property tax (Grundsteuer), which is imposed on the value of land and buildings. In economics literature, property taxes enjoy a higher acceptance than the real estate transfer tax because economists view them as efficient in regulating internal migration and at financing local public spending at the same time. While property tax is levied on the ownership of real estate and the property transfer tax on the respective acquisition, a relationship can still be established between the two.

A time-stretched real estate transfer tax

To make this point clearer, one may look at California. There, the property tax is equal to one percent of the property value. Since 1978, the value of the property has been determined by the purchase price, updated by an annual growth rate of 2 percent. If we assume an infinite holding period, at time of the purchase, a real estate owner can be made indifferent between a real estate transfer tax and a continuous tax on the purchase price updated with the growth rate. Thus, the California property tax can be interpreted, under specific conditions, as a time-stretched real estate transfer tax.

If, however, the owner intends to sell the property, then there is a significant difference between property transfer tax and the property tax. For the latter, the difference between the real estate price development and the growth rate is important: if the house price has evolved at a certain annual growth rate, the annual tax rate would not change when the owner sells the property. If the average real estate price increase was above that growth rate, the sale increases the annual tax rate and leads to a potential lock-in effect. If the growth rate of real estate prices was lower than the annual growth rate over a longer period of time, selling would even be favorable for tax purposes as it would then reduce the initial purchase price of the property. Neutrality, therefore, arises precisely when the annual growth rate is adjusted to the regional value of real estate price increases.

This kind of adjustment of the real estate transfer tax is similar to a deferral model, which has several advantages and disadvantages that require further economic analysis. One of the advantages would be that the lock-in effect is significantly reduced. Extending the tax payment over time would also allow tax revenues to be less dependent on the current dynamics of transactions. For the taxpayer, the reorganization would further mean that, at the time of purchase, less accumulated equity would be deducted for transaction costs and therefore

banks could be willing to make higher interest concessions. The tax, however, would no longer be as easy to levy as the current real estate transfer tax. Determining the annual growth rate might also raise administrative and political problems.

The tax could limit damaging local effects of agglomeration

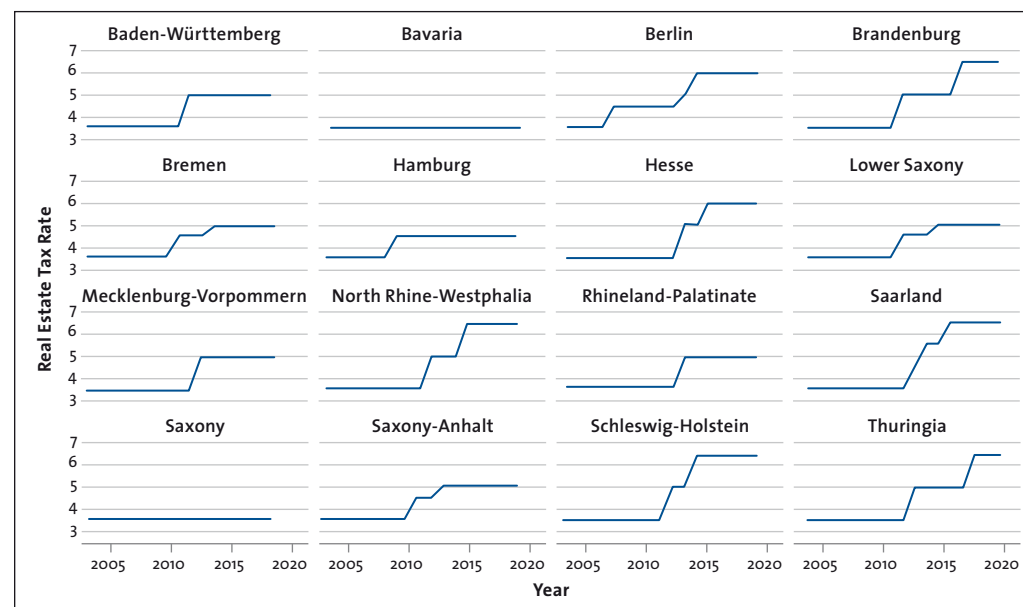
Following a reform, it is important that the reason for two taxes on land ownership become clear to taxpayers. The adjustment of the real estate transfer tax levied by the federal states

of Germany makes sense especially if the property tax of the municipalities were to be converted into a pure area tax which would, in turn, imply a very different taxable base (see Fuest et al. 2018). If the authority over the real estate transfer tax were further devolved down to municipalities, the tax would also limit the damaging local effects of agglomeration – an issue which cannot be addressed by a pure area tax.

For public acceptance, it is also important that the converted property transfer tax is not allowed to be passed automatically on through to

rents, even if market forces could do so in the long run. It might also take some getting used to by taxpayers, as real estate owners who have already paid the property transfer tax in the past would be exempt of current payments, while the part that bought after the reform would be charged for them.

Last but not least, the determination of the tax rate should be discussed. In the case of California, the rate was fixed by referendum and is virtually unchangeable. German politics would probably have difficulties adhering to such a rule. Under the current arrangement, the tax rate is determined by the timing of the sale. The extension of the tax raises the question of whether future tax rate changes should only affect future sales or whether past sales should also be affected. In order to avoid a lock-in effect, the increase has to apply to past sales as well.



Real Estate Tax Rates in Germany: Only two federal states, Bavaria and Saxony, have maintained the old nationwide tax rate of 3.5 percent, with all other federal states having increased their rate up to a maximum of 6.5 percent.

References

Fuest, C., Immel, L., Meier, V. and F. Neumeier (2018), "Die Grundsteuer in Deutschland: Finanzwissenschaftliche Analyse und Reformoptionen", München: ifo Institut; <https://www.cesifo-group.de/DocDL/ifo-studie-2018-fuest-et-al-grundsteuer.pdf>

The full text is available as SAFE White Paper No. 58 at: <https://safe-frankfurt.de/grunderwerbsteuer>

News

SAFE: Recommended for Admission to the Leibniz Association



The German Council of Science and Humanities (Wissenschaftsrat) has rated the academic work of the LOEWE Center Sustainable Architecture for Finance in Europe (SAFE) as excellent and recommended admitting it to the Leibniz Association by 2020. “We are very pleased with the vote of the German Council of Science and Humanities and proud that our work has convinced the experts,” said Jan Krahnert, Director Research of SAFE. The German Joint Science Conference (Gemeinsame Wissenschaftskonferenz) is expected to take the final decision in April/May 2019. In 2017, the State of Hessen applied for the admission of SAFE to the Leibniz Association. The Council advises the Federal Government and the State Governments on the structure and development of higher education and research.

Justin Yifu Lin: China Has a Huge Potential to Grow



Justin Yifu Lin, a former Chief Economist of the World Bank, spoke at a SAFE Policy Lecture in January on the topic of “The Economics of China’s New Era”. The event was co-organized by the Interdisciplinary Centre for East Asian Studies (IZO) and the Society for International Development, Chapter Frankfurt, as part of the First Goethe Asia Forum. In his talk, Lin explained that there is considerable potential for China’s economy to grow further but pointed out that its development depends on the global economy: Protectionism and trade conflicts may dampen the growth rate. He also warned that fast growth could foster income disparities and corruption. In his view, China will be a high-income country by 2025, and this will also change the country’s international role: “China will have to shoulder more responsibility in the world,” Lin said. He also predicted that China would invest more effectively in the infrastructure of developing countries as it understands their current situation and needs better than high-income countries.

Lively Dialogue at SAFE Conferences

At the SAFE Annual Research Conference and the sixth Frankfurt Conference on Financial Market Policy in mid-December, topical research and current financial policies were assessed. The Policy Conference focused on the financial reforms that have been implemented since the financial crisis. It was opened by Luis de Guindos, Vice President of the European Central Bank (ECB). “Substantial risk reduction has been achieved, is ongoing and should continue”, he said. In three panels, researchers, regulators, and practitioners discussed the numerous institutional reforms. They agreed that further action is needed for a sustainable and stable European financial system. At the Research Conference, academics from SAFE and other institutions held presentations in eight sessions mirroring SAFE’s main research fields, while intensive discussions among fellow researchers gave impulses for future research. Arnoud Boot, chairman of SAFE’s research advisory council, explained in his keynote speech that, for him, regulation, technology, and



customer preferences are the main drivers for change in the banking sector. “To be successful, banks will need a better understanding of their customers and to tailor their product offers accordingly”, Boot said. Otmar Issing, President of the Center for Financial Studies stressed the importance of interdisciplinary financial research in his concluding remarks.

Nicola Fuchs-Schündeln Receives a € 1.6 Million ERC Consolidator Grant



Nicola Fuchs-Schündeln, Professor of Macroeconomics and Development at Goethe University, has received one of the most respected science funding awards in the European Union. The Consolidator Grant of the European Research Council (ERC) will help her conduct a new research project on people’s behavior in the labor market, the impact of policy measures, and the identification of success factors.

In four sub-projects, Fuchs-Schündeln, a postdoctoral fellow, and several doctoral students will focus on the differing behavior of men and women in the labor market and differences in poor and rich countries. The project is funded with 1.6 million euro until 2024. Fuchs-Schündeln is a principal investigator in the Cluster of Excellence “The Formation of Normative Orders” and at SAFE. She received the Leibniz Prize in 2018, the Gossen Prize in 2016, and a Starting Grant from the ERC in 2010.

Selected Publications

Faia, E., Laffitte, S. and G. Ottaviano (2018)
 “Foreign Expansion, Competition and Bank Risk”,
 forthcoming in the Journal of International Economics.

Hirsch J. and U. Walz (2019)
 “The Financing Dynamics of Newly Founded Firms”,
 forthcoming in the Journal of Banking and Finance.

Kraft, H., Munk, C. and F. Weiss (2019)
 “Predictors and Portfolios over the Life Cycle”,
 forthcoming in the Journal of Banking and Finance.

Langenbucher, K. (2018)
 “Die Einflussnahme von Aktionären auf die Zusammensetzung des Vorstands”,
 in: Festschrift für A. Bergmann, Berlin, De Gruyter Verlag, pp. 443-456.

Siering, M. (2019)
 “The Economics of Stock Touting during Internet-Based Pump and Dump Campaigns”,
 forthcoming in the Information Systems Journal.

Recent SAFE Working Papers

Faia, E. and V. Pezone (2019)
 “Monetary Policy and the Cost of Wage Rigidity: Evidence from the Stock Market”,
 SAFE Working Paper No. 242.

Götz, M. R. (2018)
 “Financial Constraints and Corporate Environmental Responsibility”,
 SAFE Working Paper No. 241.

Gemmo, I. and M. R. Götz (2018)
 “Life Insurance and Demographic Change: An Empirical Analysis of Surrender Decisions Based on Panel Data”,
 SAFE Working Paper No. 240.

Gortner, P. and B. Massenet (2018)
 “Macprudential Policy in the Lab”,
 SAFE Working Paper No. 239.

Driessen, J., Nijman, T. E and Z. Simon (2018)
 “Much Ado About Nothing: A Study of Differential Pricing and Liquidity of Short and Long Term Bonds”,
 SAFE Working Paper No. 238.

Vellekoop, N. (2018)
 “Explaining Intra-Monthly Consumption Patterns: The Timing of Income or the Timing of Consumption Commitments?”,
 SAFE Working Paper No. 237.

Kolokolov, A., Livieri, G. and D. Pirino (2018)
 “Statistical Inferences for Price Staleness”,
 SAFE Working Paper No. 236.

Kubitza, C., Pelizzon, L. and M. Getmansky Sherman (2018)
 “The Pitfalls of Central Clearing in the Presence of Systematic Risk”,
 SAFE Working Paper No. 235.

Bernales, A., Garrido, N., Sagade, S., Valenzuela, M. and C. Westheide (2018)
 “A Tale of One Exchange and Two Order Books: Effects of Fragmentation in the Absence of Competition”,
 SAFE Working Paper No. 234.

The SAFE Working Papers can be downloaded at
<http://safe-frankfurt.de/working-papers>

Deepening of the Economic and Monetary Union: French and German Cooperation Paves the Way for Reform



Jörg Kukies
State Secretary at the
Federal Ministry of Finance
and Member of the
SAFE Policy Council

In December 2018, the Euro Summit agreed on cornerstones for a further deepening of Economic and Monetary Union. The agreement was made possible by a common Franco-German initiative agreed at Meseberg in June 2018. It will enhance the eurozone's crisis prevention and management capacity and lead to a more stable currency union.

Since the onset of the crisis a decade ago, the institutional set-up of the eurozone has been fundamentally overhauled. Yet challenges remain. It is therefore crucial not to give in to reform fatigue and instead to continue working on making the eurozone more resilient. While we are still in a benign economic environment, we are able to draw on our experience during the crisis and embed these lessons into the reform process. The decisions by the Eurogroup and the Euro Summit in December were a major step in this direction.

Member states agreed to enhance the role of the European Stability Mechanism (ESM) to strengthen the crisis prevention and resolution capabilities in the euro area. The ESM will have a stronger role in the design of support programs, as it will, together with the European Commission, sign the memoranda of understanding with countries, detailing the conditionality attached to financial assistance. The precautionary instruments will be made more effective in order to help countries with sound economic fundamentals affected by adverse shocks beyond their control. Regarding debt sustainability, the ESM will be able to independently assess the repay-

ment capacity of countries requesting assistance. Member states confirmed their intention to introduce single-limb collective action clauses in their bonds by 2022.

The ESM will serve as a backstop to the Single Resolution Fund, which will make the resolution framework more resilient and credible. In the medium term, it will be fiscally neutral and refinanced through contributions of the banking sector, shielding tax-payers' money. The backstop will take effect in 2024 or earlier if sufficient risk reduction has been achieved; a respective decision is to be taken in 2020.

The overall agreement is conditional on further progress in reducing risks in the banking sector. This includes the adoption of what is referred to as the 'banking package', especially regarding risk buffers as well as new rules on dealing with non-performing loans. Ministers were able to welcome the progress made with the European Parliament in this regard. The European deposit insurance scheme (EDIS) is a longer-term project; work has started on a roadmap for beginning political negotiations. This will include further risk

reduction, including the treatment of sovereign debt. To move forward on this, a high-level working group will be established.

Finally, the Euro Summit mandated the Eurogroup to work on a budgetary instrument for the eurozone. The goal is to improve competitiveness and convergence. This kind of instrument has been discussed for a long time, thus far without an agreement; now, on the basis of a contribution by France and Germany, work on a solution within the EU legal framework and within the EU budget can now begin.

All these elements form a comprehensive package which maintains the right balance between additional risk sharing and solidarity on one hand and risk reduction and rule-bound self-responsibility on the other, allowing for the necessary involvement of national parliaments in key decisions. This was an essential objective from the German point of view. The agreement shows the importance of Franco-German cooperation and the continued ability of Europe to compromise and integrate. It should now be implemented as soon as possible.

Events

March		May		June	
12 March 5.30 – 7.00 pm	CFS Presidential Lecture EU is not Europe Speaker: Václav Klaus, Former President of the Czech Republic	3 May 9.30 am	ILF Career Day	5 June 2.00 – 3.00 pm	Finance Brown Bag Seminar – Joint with SAFE Speaker: Tobias Sichert, Goethe University
25 March 5.30 – 7.00 pm	CFS Lecture Schulden und Politik: Die deutsche Finanzkrise von 1931 und der Aufstieg Hitlers Speaker: Tobias Straumann, University of Zurich	6 May 7.30 pm	ILF Guest Lecture Speaker: Dr. Philipp Paech, London School of Economics	7 – 8 June	Global Corporate Governance Colloquia co-organized by CFS, SAFE, GCGC and ECGI
27 March 8.30 am – 4.10 pm	IMFS Conference The ECB and Its Watchers	8 May 5.30 – 7.00 pm	CFS Conference Krypto-Währung	7 June – 6 July	GBS Open Program International Finance Speaker: Loriana Pelizzon, Goethe University & SAFE
28 March	SAFE Policy Lecture Speaker: John Cochrane, Chicago Booth	15 May 2.00 – 3.00 pm	Finance Brown Bag Seminar – Joint with SAFE Speaker: Holger Kraft, Goethe University	10 June 5.00 pm	EFL Jour Fixe Is there a Magnet Effect of Rule-Based Circuit Breakers in Times of High-Frequency Trading? Speaker: Benjamin Clapham, E-Finance Lab
29 March – 13 April	GBS Open Program Ethics in Finance Speaker: Susan Spinner, CFA Society Germany	16 May	SAFE Workshop Workshop for Young Scholars: Financial History – Reflection on the Past to Tackle Today's Key Finance Questions	12 June 7.30 pm	ILF Guest Lecture Speaker: Dr. Philipp Paech, London School of Economics
29 March – 11 May	GBS Open Program Risk Management Speaker: Mark Wahrenburg, Goethe University	17 May 9.15 am – 6.00 pm	House of Finance Conference High Public Debt: Theoretical and Historical Perspectives, co-organized with SAFE and IBF, Speaker: Barry Eichengreen	12 June 5.30 – 7.00 pm	CFS Lecture with IBF Speaker: Albrecht Ritschl, London School of Economics
		20 – 21 May	CEPR/ SAFE/ University of Mannheim Conference 4th Conference on Financial Markets and Macroeconomic Performance, co-organized with CEPR and University of Mannheim	13 – 14 June	IMFS Conference 3rd Research Conference of the CEPR Network on Macroeconomic Modelling and Model Comparison (MMCN)
		21 May	ILF Conference Conference on the Banking Union VI	14 June 9.00 am	ILF Conference Risk Sharing, Risk Reduction and Deposit Insurance in the European Banking Union
		22 May 2.00 – 3.00 pm	Finance Brown Bag Seminar – Joint with SAFE Speaker: Holger Kraft, Goethe University	21 June – 19 July	GBS Open Program Bank Management Speaker: Axel Wieandt, WHU – Otto Beisheim School of Management
		24 May – 22 June	GBS Open Program Applied Credit Risk Management Speaker: Björn Imbierowicz, Deutsche Bundesbank	26 June	SAFE Policy Lecture Speaker: Francesco Caselli, London School of Economics
		24 May – 22 June	GBS Open Program Global Asset Allocation Speaker: Raimond Maurer, Goethe University	26 June 5.30 – 7.00 pm	CFS Colloquium Speaker: John Maijor, European Securities and Markets Authority
April					
1 April	SAFE Conference Quantitative Easing and Financial (In)Stability funded by Volkswagen Stiftung				
2 – 3 April	SAFE Conference 6th International Conference on Sovereign Bond Markets				
5 April	ILF Conference DAJV-Fachgruppentag 2019				
11 April	SAFE Policy Lecture Speaker: Lex Hoogduin, University of Groningen				
27 April – 6 July	GBS Open Program Bank Risk Governance and Regulation Speaker: Thomas Kaiser, KPMG				



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