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Backhaus Jürgen: A Pioneer of Law and Economics in Europe

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Abstract
Jürgen Backhaus is one of the founders of law and economics in Europe. He is a specialist in public finance and history of economic thought. His role in law and economics was important not only as a scholar who published (and edited) tens of books and articles but also as an entrepreneur.

Biographical Sketches

In July 2015, Jürgen Backhaus retired from his position as Professor at the University of Erfurt, after a long and rich career, he started in 1970 at the University of Constance as an undergraduate student, and that brought him all around the world. He was Professor of Public Finance at the University of Maastricht from 1986 to 2001, and, from 2001 to 2015, he held the Krupp Foundation Chair in Public Finance and Fiscal Sociology at the University of Erfurt. Jürgen Backhaus published (and edited) tens of books and articles in the fields of public choice, fiscal sociology, and law and economics. He was, and still is, a scholar and a man of great immense culture. But even within academia, Backhaus is not only a scholar. He also played the role of a cultural entrepreneur. He launched, in 1994, the *European Journal of Law and Economics*, edited an important reference book, the *Elgar Companion to Law and Economics*, and then had the idea of this *Encyclopedia of Law and Economics* as an ambitious project gathering together around the word large part of the law and economics community and including ourselves as editors. He organized for decades one of the first and long-lasting European workshops in law and economics (first at the University of Maastricht and then at the University of Erfurt) and an interdisciplinary workshop in Heilbronn (Marciano and Ramello 2016).

The Contribution

In one sentence Jürgen Backhaus played a seminal role in law and economics and especially in its development in Europe. In particular, he

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was fundamental in reconnecting the Chicagoan tradition of law and economics to its European roots and in turn the rational choice approach to political economy. Those roots were then somewhat lost. Jürgen Backhaus is one of those scholars putting back in evidence the legacy of the discipline to the important debates that took place in Europe during the eighteenth and the nineteenth century, and that not only provided the ground for growing law and economics as a new discipline but also have been fundamental in shaping the physiognomy of modern Western societies (Ramello 2016). In other words, Jürgen Backhaus has the merit of having brought again in evidence the link between Europe and the USA.

That claim was clearly put forward in the aims of the *European Journal of Law and Economics* he tried in particular to shed light on the "European Community law and the comparative analysis of legal structures and legal problem solutions in member states of the European Community [. . . and] the new European market economies" while preserving a "pragmatic position informed by the history of law and economics as a scholarly discipline and the current challenges this discipline faces." (Backhaus and Stephen 1994). That is to say, his scholarship adopted a novel political economy approach to law and economics, and in this respect his contribution far exceeds the simple diffusion of law and economics in Europe. In other terms, his commitment was not only aimed at fostering the consciousness of the European roots of the discipline but equally at nurturing a European approach to it.

The reference to the continental European economic thought and its connection with law and economics has always been central to Backhaus. He always tried to match the current development of the discipline to what the great thinkers already discussed (Marciano and Ramello 2014). This was evidenced in the *European Journal of Law and Economics* but also in one of the other major publishing adventure of Backhaus, the *Elgar Companion to Law and Economics* (1999, 2005). A crossroads for favoring the blending between the American and the European scholarship of law and economics thanks to the contributions of members of the two communities, a significant part is devoted to introduce the work of important and somewhat neglected scholars like Cesare Beccaria, Friedrich List, Gustav von Schmoller, and Rudolf von Jhering, among others (Marciano and Ramello 2016). To Backhaus, going back to these scholars and to their works was necessary to enrich our understanding of the same policy questions that are still in debate nowadays.

This does not imply, however, that Backhaus ignored that the political context and the culture do matter. Much to the contrary. He was convinced that individuals do not behave in the same way in every environment. Behaviors are not changed when the conditions and culture change. Human action is contextualized. As a consequence, the same institutions – or legal rules – cannot be used in different places. Institutional arrangements are unique and linked to particular historical contexts (see, for instance, Boettke et al. 2013). Or, in other words, "different institutions are appropriate in different circumstances" (Djankov et al. 2003, 619). This was a leitmotiv in Jürgen Backhaus's thinking (Josselin et al. 2016). This led him to develop an approach that is quite specific in law and economics, not heterodox but not mainstream either. Likewise his cultural background, his form of law and economics actually evidences a way of going back to political economy. His way of envisaging the dialogue between "law" and "economics" follows what James Buchanan Ronald Coase or Guido Calabresi did rather than that of Richard Posner. Not because the latter did not link their economic analysis of law to old thinkers – in that case, Bentham and even Beccaria – but because he tended to think that institutional arrangements can be duplicated and transplanted regardless of the context. Jürgen Backhaus's work teaches us the reverse (l. 139) (see, for instance, Backhaus 2017).

Legacy

It is difficult to evaluate what will be Backhaus's legacy. He has undoubtedly influenced, directly and indirectly, a lot of scholars in law and economics, public choice, and public finance. What would remain after him is the importance of a form of *European* law and economics and the need to go back to old scholars and to anchor law and economics in their work to perpetuate a certain tradition.

Cross-References

► Economic Analysis of Law
► Law and Economics

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Banks

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Definition

Banks are financial intermediaries between economic agents with surplus funds and those with a shortage of funds and convert short-term deposits into long-term loans.

Introduction

Banks are institutions that intermediate between agents (households, firms, the government) with surplus funds and those with a shortage of funds. As such, they manage to provide for safe and liquid savings opportunities as well as long-term credit facilities, without the need for those two parties to interact and negotiate a financial contract directly. In this way, they decrease search and other transaction costs, solve potential mismatches between demand and supply in terms of maturity and degree of liquidity, and aim at solving risk and asymmetric information problems. Ultimately, the purpose of financial intermediation by banks is to make finance available for investment, leading to economic growth and financial inclusion, i.e., access to financial services for all.

In the following, we first briefly describe the traditional model of (deposit-taking) banking, including the traditionally associated risks. Section "Bank Regulation" then discusses how the traditional banking model has changed in the lead up to the global financial

crisis, while section "The 2007–2009 Global Financial Crisis" refers to financial regulation put in place as a response to the financial crisis. Section "Investment Banks, Shadow Banks and Fintech" discusses non-traditional forms of banking while section "Conclusion" concludes.

Activities and Risks

A traditional deposit-taking bank is primarily deposit funded (from households and firms) and its assets are primarily made up of credits extended to the same sectors, using an originate-and-hold approach, meaning that these credits are typically held until maturity. For liquidity purposes, banks also hold cash and liquid instruments (reserves with the Central Bank (▶ Central Bank), government bonds). Commercial banks create money by issuing deposits and making loans, while only keeping a fraction of actual cash reserves on their balance sheet. Table 1 shows the composition of the balance sheet of JP Morgan Chase in 2017, the United States' largest bank in that year. Note that like most banks, JP Morgan Chase is mainly funded by deposits and its biggest asset class is loans.

Banks' activities can roughly be divided in brokerage (bringing together providers and users of capital) and qualitative asset transformation (Bhattacharya and Thakor 1993). These activities are typically combined, so that a bank takes deposits which are short-term, liquid, safe instruments, and transforms them into long-term, illiquid, and risky loans. While an individual risk-averse depositor may not want to commit their savings in a long-term risky investment, a bank can pool a large number of deposits together and make long-term risky investments that earn a higher return. The bank will still be able to fulfill the deposit contract as long as its long-term investments pay off in regular intervals, freeing up liquidity for depositors when they want to take their money out of the bank (Diamond and Dybvig 1983; Gorton and Pennacchi 1990). Furthermore, banks are typically assumed to be better at overcoming information asymmetries than individual investors (▶ Transaction Costs), leading to a better allocation of credit by banks compared to individual investors (Holmström and Tirole 1997). Banks have a bigger incentive to actively monitor a loan contract compared to individual investors who only contribute a small part to a loan. Moreover, banks typically have a longer-running relationship with the borrower, leading to a possible information advantage as well as additional incentives to monitor over an investor that invests as a single-shot deal (Boot and Thakor 2002).

The transformation of maturity, liquidity, and risk may allow for better allocation of credit but also comes with risks, most notably the risk of a bank run (Mishkin and Eakins 2015). When depositors lose their trust in the ability of a bank to fulfill the deposit contract, they may withdraw their deposits. If enough depositors withdraw their money at once, the bank may be forced to liquidate its long-term contracts at a low price in so-called fire sales. This lowers the value of the bank's assets, leading to additional withdrawals from depositors. As such, even a normally solvent

Banks, Table 1 Asset and liability composition JP Morgan Chase 2017 (percentage total assets)

Assets		Liabilities and equity	
Cash and due from banks	1	Deposits	57
Deposits with other banks	16	Wholesale repurchase borrowing	6
Loans (e.g., mortgages)	37	Long term debt	11
Wholesale repurchase lending	8	Trading liabilities	5
Securities	14	Other liabilities	11
Trading assets	15		
Other assets	9	Equity (incl. Retained earnings)	10
Total assets	100	Total liabilities and equity	100

bank may become bankrupt through a bank run as a self-fulfilling prophecy (Diamond and Dybvig 1983). Bank runs are highly disruptive and are at the forefront of financial crises, which can lead to severe recessions, such as the Great Depression and the Global Financial Crisis of 2007–2009 (Laeven and Valencia 2018).

Bank Regulation

Because of their role in operating payment systems and credit provision, bank operations are tightly regulated. Although exact regulation differs from country to country, most countries insure deposits, have equity and liquidity adequacy requirements, and put limits on combining the activities that banks can undertake.

Deposit insurance measures disincentivize bank runs by insuring deposits up to a maximum amount: Currently $250,000 in the United States and €100,000 in EU member states (European Commission 2015). With deposit insurance depositors lose the incentive to both run on a bank and to monitor the bank, which in turn may create moral hazard: Banks then both hold fewer liquid assets as well as undertake more risky activities (Bhattacharya et al. 1998).

Countries also typically place minimum requirements on bank equity (capital requirements) and liquidity (liquidity requirements). On capital requirements, the Basel Committee on Banking Regulation provides guidelines, which also the United States and EU member states follow. Compared to Basel 1 and 2, the current iteration of Basel, Basel 3, has increased capital requirements and limits the use of internal risk models, which were a main feature of Basel 2. Basel 3 proposes an unweighted ratio of equity to assets of 3%, together with a ratio of equity to risk-weighted assets up to 13% (depending on the definition of equity, state of the economy and type of bank). Since bankruptcy can only occur when a company's assets are worth less than its debt liabilities, minimum equity requirements automatically protect against bank insolvency by raising equity and thus lowering debt. By including a ratio that defines minimum equity in function of risk-weighted assets, higher average asset risk needs to be matched by more equity. Furthermore, more equity may prevent excessive risk taking resulting from debt overhang in banks (Admati et al. 2013).

Besides equity requirements, Basel 3 also proposes liquidity requirements: The Liquidity Coverage Ratio requires banks to hold enough liquid assets (such as cash and overnight deposits at the central bank) to cover a 30 day net cash outflow.

Different countries also implement restrictions on the portfolio composition of banks. In the United States, commercial banks were forbidden from undertaking investment banking activities and activities over state lines under the 1933 Glass-Steagall Act. EU member states had no such regulation and partially because of this, many banking sectors in the EU feature so-called universal banks which combine commercial and investment banking activities, while the US historically has had more specialized banks. This Glass-Steagal Act was partially repealed in 1999 by the Gramm-Leach-Bliley Act, which allowed US banks to both bank across state lines as well as undertake commercial and investment banking activities together.

Interest rate ceilings upheld through usury law are sometimes argued as an effective way to limit risk-taking by banks (Posner 1995). Usury laws were common among US states in the nineteenth century (Benmelech and Moskowitz 2010) but have since been replaced by other forms of regulation (such as equity requirements discussed above).

Indirectly, banks are also affected by competition law. Competing visions arise between competition-fragility and competition-stability (Beck 2008). The competition-fragility view notes that competition in banking may lead to excessive risk-taking to outcompete rivals, while the competition-stability view notes that market power may lead to higher interest rates with accompanying higher risk, while simultaneously creating banks that may enjoy implicit governmental subsidies from becoming too-big-to-fail. As such, it is unclear how financial stability is fully impacted by antitrust law.

Besides explicit regulation of banks, large interconnected banks can enjoy implicit governmental guarantees. Because of the adverse effects of a bank run, governments tend to be inclined to bail out banks when they would otherwise default, especially if they are big or highly connected to other banks, leading to banks that are too-big-to-fail or too-connected-to-fail. Like deposit insurance, bailouts disincentivize bank runs but create moral hazard. Because of deposit insurance and too-big-to-fail bailouts, depositors and other creditors have little incentive to monitor banks, because they will be compensated regardless of any risk the bank takes. Meanwhile, shareholders enjoy relatively high returns that come with risk during good economic times, while the government bears the risk of a downswing, leading to an appetite for risk-taking by the bank.

The 2007–2009 Global Financial Crisis

In the leadup to the 2007–2009 Global Financial Crisis, banks had over time strayed away from an originate-and-hold model towards an originate-and-distribute model through a process called securitization. In the process of securitization, banks repackage loans (e.g., mortgages) and sell them off to various other investors. Typically, these repackaged loans would then be sliced into tranches which differed by risk. The safest (super-senior) tranche would be paid first, while the junior tranche was paid out last. This junior tranche would normally be held by the issuing bank, giving the bank an incentive to monitor the securitized loans as a form of insurance to the outside investors. In practice, the risk involved in these junior tranches would be insured through credit default swaps, an insurance against default. In theory, securitization and tranching of securities meant that risk would be borne by the parties that were most able to bear the risk. In practice however, the securitized products were rated too highly by credit rating agencies (▶ Credit Rating Agencies), while risks were underestimated and banks lost an incentive to monitor loans because they had insured their losses through credit default swaps (Brunnermeier 2009).

The trigger for the start of the crisis in 2007 was an increase in subprime mortgage defaults in the United States (Van Essen et al. 2013). These defaults directly led to a fall in the value of securitized loan products, which in turn rippled through an interconnected financial system. Northern Rock, a UK-based retail bank faced a bank run in September of 2007 and was eventually nationalized to prevent default. In March 2008, investment bank Bear Stearns was taken over by JP Morgan Chase to prevent bankruptcy. The crisis hit its peak in September 2008 with the fall of investment bank Lehman Brothers. In October 2008, the US Treasury announced a $700 billion bailout plan, with similar bailout plans all over Europe. The financial crisis had a large impact on the banking sector. Table 2 shows a geographically shift of the biggest banks away from Europe towards Asia. Besides this geographical shift, the banking sector has been fundamentally altered by additional financial sector regulation (Hull 2018).

Banks, Table 2 Assets of the world's largest banks in 2007 and 2017

Biggest banks (2007)	Country	Assets ($ bln)	Biggest banks (2017)	Country	Assets ($ bln)
Royal Bank of Scotland	UK	3783	ICBC	CN	4009
Deutsche Bank	DE	2954	CCBC	CN	3400
BNP Paribas	FR	2477	ABC	CN	3236
Barclays	UK	2443	Bank of China	CN	2992
Crédit Agricole	FR	2068	Mitsubishi UFJ	JP	2785
UBS	CH	2007	JPMorgan Chase	US	2534
Société Générale	FR	1567	HSBC	UK	2522
ABN AMRO	NL	1499	BNP Paribas	FR	2357
ING Bank	NL	1453	Bank of America	US	2281
BoT-Mitsubishi UFJ	JP	1363	Crédit Agricole	FR	2117

Post-Crisis Regulation

In the wake of the financial crisis, regulation has focused on increased capital (i.e., equity) and liquidity requirements, the formulation of resolution schemes, and the reform of bank business models. In the USA, financial regulation in the wake of the financial crisis falls under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), while in the EU financial regulation falls under the Bank Recovery and Resolution Directive (BRRD) and the Capital Requirements Directives (CRD IV) – Capital Requirements Regulation (CRR). Both follow recommendations made in Basel 3 by featuring higher capital (equity) requirements than before the crisis and feature explicit liquidity requirements, where Basel 2 had relied on supervisory review for liquidity coverage. Both the BRRD and Dodd-Frank also feature living wills, in which financial institutions have to submit a plan to the regulator on the orderly dissimilation of the bank in the case it defaults.

A unique feature of Dodd-Frank is the *Volcker rule*, which explicitly forbids deposit-taking banks from engaging in proprietary trading. Although there is some discussion on the feasibility of distinguishing proprietary trading from trading with the intent of hedging (Elliot and Rauch 2014), the rule attempts to limit risk-taking in banking and as such features elements that are similar to the 1933 Glass-Steagal Act. Similar proposals on bans on proprietary trading have been made in the EU (European Commission 2014) but have not been put into effect as of yet. As a special case, UK banks are subject to ringfencing: Large UK banks must separate their retail banking and investment activities. The activities can still be carried out under the name of a single bank, but the retail and investment bank divisions can only interact with one another at arm's length.

State Aid by national governments is not allowed within the European Union to prevent member states from favoring domestic companies. During the financial crisis, multiple EU member states were forced to aid domestic banks in order to keep them from collapsing and causing severe recessions. In order to promote financial stability, competition policy (such as the policy on state aid) can be softened during times of financial crisis (Hasan and Marinc 2016). Since the financial crisis, the European Commission has started working on implementing a banking union within the EU. European banks now face a Single Supervisory Mechanism (SSM) and a Single Resolution Mechanism (SRM) with the intent of weakening the links between banks and the sovereign governments of the member states. Proposals on a European Deposit Insurance Scheme (EDIS) are a part of the banking union roadmap but have not been implemented as of yet.

Investment Banks, Shadow Banks, and Fintech

Delineating the borders of what constitutes a traditional bank is not always obvious as some financial intermediaries can act as complements or substitutes. *Investment banks* are private companies that cannot take deposits and that engage in finance related activities. Typical investment bank activities include raising funding, underwriting, trading in assets and derivatives, and assisting companies in issuing securities and supporting mergers and acquisitions. Traditionally, large investment banks such as Goldman Sachs followed a partnership model until the end of the twentieth century when many large investment banks went public. *Shadow banks* (▶ Shadow Banks) are financial intermediaries that provide bank-like services but are not classified as banks and as such fall outside of banking regulation (Claessens et al. 2012). Depending on the exact definition, shadow banks include investment banks, pension funds, money market funds, insurance companies, fintech companies and many more. Because shadow banks do not have a banking license, they are partially exempt from the regulation that banks face. However, they are also less likely to be bailed out, and they may be subject to other regulation, such as rules for insurance companies (Solvency regulation). *Fintech*

companies are somewhat of a catch-all term for nontraditional players that enter the market for financial intermediation with an emphasis on new technology, most notably data-analysis. Examples of fintech companies include Paypal in payment processing, Greensky in loan provision and Betterment in financial management. The biggest current fintech company with assets of $150 billion in 2017 is China-based Ant Financial (former Alipay) which provides payment processing as well as wealth management and loan financing. It is unclear yet how traditional banks and fintech companies will interact (Boot 2017), although fintech may be instrumental in increasing financial inclusion in markets in which banks are relatively inactive, for example, through mobile banking.

Conclusion

Banks transform liquid short-term, risk-free deposits into long-term risky loans, which may optimize credit allocation but also opens up the possibility of bank runs. Deposit insurance schemes and governmental guarantees mitigate the possibility of bank runs but create moral hazard and risk-taking incentives in turn. Because excessive risk-taking by banks may lead to financial crises, tight regulation of banks is necessitated, even if regulation may never fully prevent another financial crisis.

Cross-References

- ► Central Bank
- ► Credit: Rating Agencies
- ► Financial Regulation
- ► Shadow Banking
- ► Transaction Costs

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Becker, Gary S.

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Abstract

Gary Becker was an American economist who was awarded the Nobel Memorial Prize in 1992 for having expanded the scope of economics to such "outlandish" topics as crime, racial discrimination, education, addiction, fertility choices, and marriage and the family. A member of the Chicago school of economics, he was especially influential in the development of the economic analysis of law.

Biography

Gary S. Becker (December 2, 1930–May 3, 2014) was an American economist who won the Nobel Memorial Prize in economics in 1992. Becker was initially trained at Chicago as a labor economist in the early 1950s. His PhD dissertation applied microeconomics to an unusual topic for the time, discrimination. Becker notably showed that discriminatory practices were costly and, thus, would not necessarily survive to the process of market competition. In the late 1950s, he moved to Columbia, where he developed other controversial theories mobilizing microeconomics and rational choice applied to topics such as fertility, human capital, the allocation of time, as well as crime and law enforcement (Fuchs 1994). He returned to Chicago in the late 1960s, where he stayed for the remaining of his career. There, he kept on producing trailblazing contributions on topics such as marriage and the family, social interactions, sociobiology, and rational addiction. At the turn of the 1970s, Becker rose to prominence: during the period 1971–1985, he was the most widely cited economist (Medoff 1989).

Innovative and Original Aspects

The most distinguishing feature of Becker's work is that it contributed to the movement called "economics imperialism" (Lazear 2000; Swedberg 1990), which expanded the scope of economics outside its traditional boundaries (i.e. the analysis of market transactions, wealth, etc.). He was awarded the Nobel Memorial Prize precisely "for having extended the domain of microeconomic analysis to a wide range of human behaviour and interaction, including nonmarket behaviour" (http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1992/). Thus, he was influential in promoting a definition of economics centered on its method rather than on its scope of analysis. Defined as "the combined assumptions of maximizing behavior, market equilibrium, and stable preferences, used relentlessly and unflinchingly" (Becker 1976, p. 5), his "economic approach" was grounded on his research on the allocation of time which eventually led him to build a renewed version of the theory of consumer behavior. Consumer behavior mimics the behavior of producers: the rational agent combines market goods and services with time and skills in order to produce nonmarketable "commodities" that deliver, ultimately, utility (McRae 1978; Fuchs 1994). This is considered as a key methodological foundation of the "Chicago school of economics," making Becker one of its most influential members, alongside Milton Friedman, George Stigler, and a few others (Emmett 2010). In this strongly policy-oriented approach, the stability of preferences is a central assumption: the economist has to relate changes in behavior to changes in prices *only* (Emmett 2010). Thus, differences in consumption (and more generally in behavior) among individuals are more related to differences in the opportunity cost of time and other "shadow prices" of various activities than to differences in tastes (Lazear 2000). For instance, fertility decisions are dependent on the opportunity cost of time spent to raise a child, as well as the cost of education. Thus, as countries get richer and individuals better educated, the shadow price of children increases, reducing the "demand for large families" (see Becker's Nobel

Prize Lecture (http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1992/becker-lecture.pdf)).

Impact and Legacy

Becker was influential in the development of traditional questions in labor economics, but in the development of new subfields as well. Among the most important ones are the economics of the family, the economics of education, and law and economics. Regarding the latter subfield, Becker's 1968 paper "Crime and Punishment: an Economic Approach" was highly influential, because it showed how economic analysis could be used to devise optimal laws, especially how to compute the levels of severity of punishment and of probability of conviction that would minimize the social cost of crime (Lazear 2000). But Becker's influence on the field of law and economics was even more pervasive. It derived from his achievements in broadening the scope of application of rational choice theory. Indeed, his approach to economics opened the door for an economic analysis of judicial behavior, as well as provided tools to analyze, from an economics point of view, numerous litigations involving discrimination at work, wage differentials, employment at will, no-fault divorce, inheritance, and taxation (Posner 1993).

Cross-References

► Economic Analysis of Law

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Behavioral Law and Economics

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Definition

Behavioral law and economics is a research field in law and economics, which employs methodologies borrowed from behavioral economics. Behavioral economics in turn combines economics and cognitive psychology and produces research results indicating, in general, that individuals' choices in various decision-making circumstances may depart from what can be predicted from traditional neoclassical economics due to psychological biases. Behavioral law and economics is a relatively new and growing field and has recently been applied to virtually all areas of law, generating interesting and sometimes provocative research results.

Behavioral Law and Economics

Behavioral law and economics is a relatively new field: academic writings began to appear in

earnest in the late century. Although it initially focused on a few legal topics, it has recently been applied to virtually all areas of law, generating interesting, and sometimes provocative, research results.

Behavioral law and economics is in some respects a natural offshoot from the development of behavioral economics. Behavioral economics grew as an academic field through the 1970s and 1980s. Important early contributions include Herbert Simon's work on bounded rationality and prospect theory developed by Daniel Kahneman and Amos Tversky. By the 1990s, many economists and psychologists joined the field and made important contributions. Kahneman and Tversky (2000) contain many of these contributions, and Camerer et al. (2004) contain relatively recent contributions. From around the mid-1990s, Cass Sunstein and Richard Thaler (from the 1980s in Thaler's case) began publishing, individually or jointly, a series of academic articles documenting various forms of cognitive biases and psychological limitations that are relevant to law and economics.

Research in behavioral economics continued vigorously through the 2000s. Some of the relatively new and interesting research results were published through edited volumes such as Frey and Stutzer (2007, delving into the concept of trust and applying developments in neuroscience to behavioral economics, among others) and Diamond and Vartiainen (2007, applying behavioral economics to public economics, development economics, health economics, organizational economics, and other subject areas of economics). Also, there is a vast academic literature related to financial economics, which has grown to form an independent field of research, i.e., behavioral finance. Different from this, a line of recent research in cognitive psychology developed into happiness studies, with some obvious applicability in law. For developments in happiness studies, see Posner and Sunstein (2010) and Frey (2008).

Building upon earlier research results in behavioral economics, by the late 1990s, an academic literature began to emerge that could be labeled as behavioral law and economics. Sunstein (2000) is a showcase containing important results of academic research in this period. Throughout the 2000s, a growing number of researchers began participating, expanding considerably the overall horizon covered under the rubric of behavioral law and economics. Many academic journals began routinely publishing articles written from behavioral law and economics perspectives. Several notable edited volumes were also published, including Parisi and Smith (2005), Gigerenzer and Engel (2006), Farahany (2009), and perhaps most comprehensively to date Zamir and Teichman (2014). Behavioral law and economics is now applied to almost all areas of law, including contract law, tort law and regulation, property law, criminal law, corporate law, consumer protection, competition law, labor and employment law, environmental law, health law, dispute resolution and procedural law, tax law, and international law.

Behavioral law and economics in general employs methodologies and insights that are developed and used in behavioral economics. Methodologically, behavioral economics (and, by extension, behavioral law and economics) places an emphasis on obtaining results through empirical analyses. Such empirical analyses often involve conducting experiments in a laboratory setting, rather than analyzing large-scale statistical data. Documenting various cognitive biases and demonstrating specific instances where individuals' choices depart from rational choices have been the main contribution of behavioral economics to the existing economics literature. Researchers in behavioral law and economics sometimes conduct original experiments or other empirical studies themselves and, at other times, simply borrow results from behavioral economics and construct their arguments. These researchers often try to draw legal and policy implications from these studies and from various cognitive biases. More recently, researchers started to draw on insights from the social psychology literature at large, extending beyond the confines of cognitive biases. For an example of this line of research, applying social psychology scholarship on interpersonal interactions to the decision-making process in the corporate setting, see Langevoort (2012).

Many and a growing number of researchers have recently made contributions to the literature of behavioral law and economics, facilitating the development of a comprehensive and coherent theoretical framework. Many of the efforts have centered on cataloging circumstances under which an individual's decision-making systematically departs from what rational choice theory would predict. Cognitive biases that are commonly referred to in the academic literature include prospect theory, endowment effects, and framing effects. These biases tend to generate contextual judgment errors, and it has been shown that, due to these biases, an individual's decision for an identical set of choices may be different depending on the contextual circumstances. For instance, it has been demonstrated that an individual's decision may differ whether an identical set of choices is presented in a "gain" frame or a "loss" frame and that individuals tend to show "loss aversion." An implication of these findings is that the Coase Theorem may not work if contextual judgment errors are at play. There are different types of biases which are related to problems of self-assessment such as hyperbolic discounting, optimistic bias, availability heuristic, and impact bias. For an introduction and illustration of various forms of biases, see Jolls (2007), Wilkinson (2008), and Kahneman (2011).

Drawing on research results demonstrating various cognitive biases, some researchers have tried to derive policy prescriptions. Behavioral law and economics has indeed been applied to various legal areas where policies or regulations are relevant. A noteworthy recent example, with strong policy prescriptions applicable to the consumer credit market, is Bar-Gill (2012). Efforts to implement policy prescriptions have in fact gained a substantial momentum in certain countries, most notably the USA and the UK.

In general, an eventual policy goal seen from behavioral law and economics perspectives would be to assist consumers and other decision-makers in order to induce them to make genuinely informed decisions and, by doing so, to let them make choices that they would make in the absence of cognitive biases. This, however, would not necessarily mean providing as much information as possible. Rather, supplying an adequate amount of information in an adequate choice framework would be important. Policy proposals run a gamut from making the choice framework more simplistic by, e.g., setting an appropriate default rule or making a choice set simpler, to a more direct and active intervention by the government. A major underlying tension in prescribing policy proposals would be between, on the one hand, giving sufficient guides and information to decision-makers inducing them to make decisions in their best interests and, on the other hand, not interfering with their inherent freedom to make choices and not distorting their preferences.

Behavioral law and economics has recently drawn considerable interests among many researchers in law and economics and has produced many noteworthy research results. At the same time, it also has had to face not a small amount of criticism. Such criticism is mostly concerning (1) the theoretical cohesiveness of various psychological biases and (2) the justifiability of policy prescriptions.

About the theoretical cohesiveness of various psychological biases, those who are critical raise a question as to how to link these biases together and to propose a consistent and cohesive theoretic framework. While they in general do not challenge the existence of various cognitive biases, they cast doubt on the capability of behavioral law and economics to go beyond merely compiling various biases and to come up with a theoretical framework which can eventually replace or supplement the framework of rational choice theory.

About policy prescriptions, the challenge would be to justify individual policy proposals. In this area, for the most part, the existence of psychological biases is not to be denied either. The real challenge would be to show a clear logical or empirical link and relevancy between cognitive biases, on the one hand, and policy prescriptions, on the other. In particular, heated debates were raged regarding the feasibility of the government's provision of paternalistic guidance or intervention for the benefit of individual decision-makers, while at the same time leaving these individuals with their freedom to make

choices. Included in this line of criticism is the claim that demonstrated biases may not be robust enough and may manifest themselves differently when exposed to actual market institutions.

Both types of criticism referred to above would perhaps reflect the state of development of behavioral law and economics as an independent research field. That is, while interests in behavioral law and economics grew dramatically in recent decades, it is still a relatively young academic field and as such lacks loads of accumulated research results. This, of course, does not mean that the field does not have a bright future prospect. On the contrary, as more and more results are accumulated, its theoretical and empirical foundations would become more robust and sophisticated and would be able to provide analytic framework that could supplement the more traditional rational choice theory.

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Behavioral Law and Economics of Contract Law

► Limits of Contracts

Black Economy

► Shadow Economy

Blackmail

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Abstract
The criminality of blackmail has been debated vigorously by legal theorists and economists for a considerable amount of time. Yet to date there appears to be no universally agreed upon theoretical rationale for making blackmail illegal. This entry reviews the theory of blackmail developed in the law and economics literature over the last 40 years and some of the critiques that were leveled against it. It argues that the social efficiency considerations emphasized in the economic model of blackmail offer a coherent unifying framework for thinking about this issue.

Introduction

Most of the legal codes treat blackmail as a crime. Despite this fact, legal theorists have had a tough

B

time explaining why this is the case. In blackmail a perpetrator first threatens to reveal a piece of information about a potential victim or perform a similar act perceived as undesirable by the latter. Next he offers the victim a promise of silence in exchange for a monetary compensation. Both the threat and the offer of a voluntary exchange transaction are perfectly legal actions if taken on their own. Yet combined together they constitute a crime. This paradox of blackmail has attracted a lot of scholarly attention not only because of the perceived logical contradiction in which two rights combined make a wrong but also because of its deeper implications for the legal rules which deal with bargaining and regulation of information. In the words of Katz and Lindgren (1993, p.1565):

> It has come to seem to us that one cannot think about coercion, contracts, consent, robbery, rape, unconstitutional conditions, nuclear deterrence, assumption of risk, the greater-includes-lesser arguments, plea bargains, settlements, sexual harassment, insider trading, bribery, domination, secrecy, privacy, law enforcement, utilitarianism and deontology without being tripped up repeatedly by the paradox of blackmail.

The literature on blackmail spans several disciplines, including legal studies, philosophy, and economics, and is therefore too broad to be comprehensively reviewed here. The focus of this entry will be on the theory of blackmail in the law and economics tradition which originates with the works by Ginsburg and Shechtman (1993) and Coase (1988). Not surprisingly, the unifying theme in this strand of the literature is the relationship between the blackmail and economic efficiency. In particular, this body of work has demonstrated convincingly that in general the blackmail transaction is likely to be wasteful and welfare reducing. This happens because the blackmailer faces a set of perverse incentives leading to an equilibrium in which social costs exceed social benefits. It is the likelihood of high social cost generated by the parties involved in the transaction that justifies the criminalization of blackmail.

Despite its success in formulating a coherent approach to resolving the paradox, the economic theory of blackmail has a few gaps which seem to limit its universality. First, due to the sheer complexity of the phenomenon of blackmail, there are important types of blackmail transaction which do not seem to generate high social cost and thus fall outside the scope of the theory. Second, some commentators have argued that in addition to resolving the paradox of blackmail, a successful theory must also address the related "paradox of bribery": if blackmail is a crime, why is it not a crime for someone to accept an offer of payment from a potential victim in exchange for the promise not to reveal the damaging information about them? This entry concludes by discussing these challenges to the economic theory of blackmail and possible ways to address them.

The Economic Theory of Blackmail

From an economist's point of view, the problem of blackmail is closely related to the problem of externalities and bargaining. Indeed, in his 1987 McCorkle Lecture (Coase 1988), Ronald Coase states that the issue of blackmail first came to his attention in the process of writing "The Problem of Social Costs" (Coase 1960). For example, if a party responsible for the creation of a negative externality is not liable for the damage it creates, would it have an incentive to threaten to increase its output beyond the profit maximizing level in order to extract more surplus from the party affected by the externality? Similarly, if the creator of the externality is liable for the damage, wouldn't the other party have an incentive to exploit this fact by threatening to take an action which would increase the damage (and hence the compensation received) beyond the socially optimal level? Coase discusses both of these possibilities in "The Problem of Social Costs," but does not comment on the desirability of regulating blackmail. As he explained later (Coase 1988):

> My purpose in pointing this out was to show that actions which were undertaken solely for the purpose of being paid not to engage in them, actions which could be called blackmail, would arise whatever the rule of liability, or if you like, the system of rights. I did this not to initiate the discussion of blackmail, but rather to avoid having to do so. In, any case, had I wanted to discuss the subject of

blackmail, the regime of zero transaction cost would have provided a poor setting in which to do so.

The next time we can see blackmail mentioned in the economic context is in the article by Landes and Posner (1975). In that paper the authors offer a general discussion of the private enforcement of the law and argue that the private enforcement of law by the means of blackmail is likely to be inefficient and therefore blackmail should be deemed illegal. The first full treatment of the problem of blackmail emphasizing the role of transaction costs was provided in 1979 by Douglas Ginsburg and Paul Shechtman in their manuscript "Blackmail: An Economic Analysis of the Law" which was later published as Ginsburg and Shechtman (1993). This paper was first to offer a formal argument demonstrating why legalizing blackmail would be detrimental to social welfare. In particular, consider a blackmailer (B) who threatens to collect and then disclose potentially damaging information about a victim (V). Suppose that B's cost of collecting information is $200 and that B expects that V would be willing to pay up to $300 to prevent the disclosure. If blackmail were legal, B would proceed with his plan and earn a profit of $100. This transaction, however, creates a net social loss because resources with positive opportunity costs are used for the purpose of redistributing existing wealth from one individual to another. Consequently, it makes sense to prevent such transactions from taking place, as "no rational economic planner would tolerate the existence of an industry dedicated to digging up dirt, at a real resource cost, and then reburying it" (Ginsburg and Shechtman 1993).

The preceding analysis assumes that information collected by B has no value to other people, besides being damaging to V. However, the conclusion does not change if we assume that this information has a positive market value, as, for example, in the case of celebrity gossip. If the market price of the information is $200, then efficiency dictates that only information-gathering projects which cost less than $200 should be undertaken. Allowing B to threaten the victim, who is willing to pay more than the market price, would violate this condition and encourage investment in projects with negative social value. Note that if the gathering of information costs less than the market price ($200), it will be undertaken even if blackmail is illegal. Thus criminalizing blackmail is socially efficient.

While the economic logic behind the criminalization of blackmail is rather straightforward, the above discussion made a number of implicit assumptions which should be critically examined. For example, how does the form of the available contractual arrangement (e.g., legally binding contracts) between the parties affect the equilibrium? Gomez and Ganuza (2002) construct a formal game theoretic model of bargaining under perfect information to address this question. They consider three regulatory regimes: criminal blackmail, legal blackmail without enforceable contracts, and legal blackmail when binding contracts are available. Their results essentially support the intuition developed by Ginsburg and Shechtman, allowing the authors to conclude that criminalization of blackmail improves efficiency by correcting the blackmailer's incentives to collect and reveal information. As an extension of the model, Gomez and Ganuza (2002) also consider the case in which information revelation is socially valuable and find that the case for the criminalization of blackmail becomes even stronger under these circumstances.

Some Critiques of the Theory

The theory of blackmail discussed above offers a simple and intuitive explanation of the legal treatment of blackmail by appealing to the notion of economic efficiency. Nevertheless, it has faced a number of challenges, some of which deserve a closer look. The first important critique concerns the scope of the theory and its applicability to each possible type of blackmail. It is well understood that blackmail can come in many guises. Hepworth (1975) distinguishes four types of blackmail: *participant* blackmail, which occurs as a result of prior relationship between the parties; *opportunistic* blackmail, arising when information is acquired accidentally by the blackmailer; *commercial research* blackmail, based on the

information which was acquired on purpose; and *entrepreneurial* blackmail, in which the blackmailer himself creates a set of circumstances which implicate the victim. Lindgren (1989) uses this typology to argue that the economic theory of blackmail is incomplete because it cannot be used to justify criminalization of the participant and opportunistic types of blackmail. Indeed, if no resources were used to acquire information, then the efficiency considerations seem to lose their relevance and criminalization of blackmail remains a puzzle. One possible counterargument to this critique was proposed by Coase (1988), who asserts that the resource costs are never equal to zero because the process of negotiating and securing the blackmail transaction requires expense of real resources. It is however difficult to argue that these transaction costs in the blackmail negotiation are conceptually different from the similar costs arising in the process of negotiating any voluntary exchange contract. Ginsburg and Shechtman (1993) go a step further asserting that even if information is acquired accidentally, the blackmailer would be willing to incur the cost of disseminating the information in order to establish his credibility should a new blackmail opportunity arise in the future. In their view it is this willingness of the blackmailer to invest resources in establishing his reputation (wasteful from the social planner's point of view) that gives rise to efficiency losses in the case of participant or opportunistic blackmail.

Another criticism commonly leveled against the economic theory of blackmail is the fact that it is not able to address the paradox of bribery, which arises when one considers the situation in which a potential victim offers a payment to the informed party in order to ensure that information is not released. As pointed out by DeLong (1993):

> it is not unlawful for one who knows another's secret to *accept* an offer of payment made by an unthreatened victim in return for a potential blackmailer's promise not to disclose the secret. What would otherwise be an unlawful blackmail exchange is a lawful sale of secrecy if it takes the form of a "bribe". Lawful bribery poses an obvious challenge to theories that are premised on either the wrongfulness or wastefulness of the blackmail exchange...

Thus it seem that even though bribery and blackmail transactions aim to achieve the same final outcome, the identity of the party making an offer is crucial when deciding whether this transaction constitutes a crime. Interestingly, the legality of bribery can potentially create the same perverse incentives to "dig up dirt" on someone as in the case of legal blackmail. The only difference is that the party possessing the information is not allowed to make an explicit threat but would have to find a way of letting the other party know about the existence of the information and wait for the victim to come up with the offer instead.

While the existing literature on blackmail has not paid much attention to the paradox of bribery, it is not difficult to imagine a set of circumstances in which both the criminal blackmail and legal bribery can be defended on the grounds of economic efficiency. For simplicity, consider the case of accidental blackmail, and suppose that information has a positive social value. It is reasonable to assume that the damage suffered by the victim if information is revealed is known only to him, while the market value of information is common knowledge. Now consider the problem of a social planner who decides on the allocation of the bargaining power between the blackmailer and the victim. As in many similar bargaining settings under asymmetric information, to ensure efficient outcome, it suffices to give all the bargaining power to the informed party, i.e., the potential victim. If the victim's damage is higher than the social value of information (represented by the market price), his take it or leave it offer will ensure a mutually beneficial contract under which information is not revealed. If the damage is lower than the market price, no such deal can be reached and information will be revealed. In both cases a socially efficient outcome is obtained. On the other hand, if the bargaining power resides with the blackmailer, inefficiency can arise due to his lack of knowledge of the victim's reservation price (see Yerokhin (2011) for a detailed argument along these lines). The preceding analysis thus shows that efficiency considerations are able to justify both the criminalization of blackmail and the legality of bribery, although under rather restrictive assumptions that the information

acquisition is costless (e.g., participant or opportunistic blackmail) and that the market price of information reflects its true social value. In any case the situation in which information acquired by the blackmailer has a positive social value raises a set of interesting questions related to the public good nature of information and its implications for the regulation of blackmail. This issue remains largely understudied in the literature. One notable example is Miceli (2011), who offers an analysis along these lines and concludes that the regime of legal blackmail would lead to inefficient suppression of information due to the fact that the blackmailer is not able to extract the whole social surplus.

Conclusion

The economic theory of blackmail originating in the works of Ginsburg and Shechtman (1993) and Coase (1988) provides a simple and intuitive solution to the paradox of blackmail. It achieves this by considering the incentives which would arise in a regime of legal blackmail and their potential impact on economic efficiency. Treating the phenomenon of blackmail as a special case of bargaining about externalities with positive transaction costs, it argues that the blackmail transaction is likely to be welfare reducing and therefore should be penalized. While the basic arguments of the theory are well understood and accepted in the literature, there remain a few open questions as to whether the efficiency-based arguments can deal with all of the different types of blackmail and related phenomena such as bribery. This seems to be a fruitful area for the application of the game theoretic models of bargaining under asymmetric information, which could potentially strengthen the existing theory.

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Blockholders

▶ Concentrated Ownership

Bloomington School

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Definition

The Bloomington School of Public Choice and Institutional Theory created by the 2009 Nobel Prize in Economics corecipient, Elinor Ostrom, and movement co-founder, Vincent Ostrom, have contributed to the theory of collective action, the analysis of metropolitan administration, to governance theory, the theory of goods and their production, to the empirical study of natural resources management and of the commons, to the nature and role of social norms, and to the problems of constitutional political economy and institutional design. It also advanced significant

methodological contributions to the study of polycentric, multilevel, dynamic institutional arrangements. In addition to the empirical, theoretical, and methodological research, the Bloomington school has been associated to a broader philosophy of social order and change centered on the "human condition" and the artefactual reality created by fallible but capable human beings in their process of evolution. This facet of the Bloomington school, especially developed in the writings of Vincent Ostrom, combines the distrust and skepticism regarding the "seeing like a state" stance in social and policy analysis, with the advocacy of a "seeing like a citizen" attitude grounded in a deep commitment to democracy and self-governance as normative ideals.

Bloomington School

The notion that there is a particular approach to Public Choice and Institutional Analysis specific to a group of scholars associated to Indiana University Bloomington was first articulated as an intellectual history point by William C. Mitchell in "Virginia, Rochester, and Bloomington: Twenty-five years of public choice and political science," published in *Public Choice* in 1988: "Aside from the family analogy, it seems that three schools of thought have appeared in public choice and that they are sufficiently different to warrant distinctive labels. Mine are taken from their geographical locations: Virginia (Charlottesville; Blacksburg; Fairfax), Rochester, and Bloomington. At each of these institutions one or two dominant figures led and continue to lead in the effort to construct theories of collective choice: Riker at Rochester, Buchanan and Tullock at various Virginia universities, and the Ostroms at Indiana."

The Bloomington school created by the 2009 Nobel Prize in Economics corecipient Elinor Ostrom and movement cofounder, Vincent Ostrom, has twofold roots. First in the Public Administration literature and debates. While engaged in the study of metropolitan governance – and especially the heated debates of the 1960s regarding the problems of metropolitan reform via consolidation and centralization –, Vincent and Elinor Ostrom realized the limits of the mainstream theory of public administration and its policy implications, as expounded and applied to that specific set of problems. Hence, they turned their attention to the cutting edge developments in social sciences, set at that time into motion by James Buchanan and Gordon Tullock and their network of scholars who were advancing the study of "nonmarket decision making," while they were creating the "no name field" which was later to become the field of Public Choice. The Ostroms turned into key members of the new field, each occupying at one point the position of the President of the Public Choice Society. Out of the combination of classical Public Administration theory with the emerging Public Choice theory and its associated Constitutional Political Economy ramifications grew what is now known as the "Bloomington School" of Public Choice or Institutionalism (Aligica and Boettke 2009).

The Ostroms started their work with an effort to rebuild a Public Choice-based theory of public administration which questioned the assumption, deeply ingrained in the mainstream outlook, according to which large bureaucracies were more efficient than the systems based on competition or bargaining in solving collective action problems and in providing public goods and services. That initial effort had two facets. First, the Ostroms and their associates organized around what was to become the Bloomington "Workshop in Political Theory and Policy Analysis," started to develop the conceptual and the analytical tools that could explain the structure, functioning, and performance of governance arrangements in conditions of complex, multilevel, institutional diversity. Second, they noted that to advance the understanding of such governance phenomena it was not sufficient to simply note the differences between the two approaches to metropolitan governance (mainstream public administration vs. the public choice) and to suggest – based on the formal features of the theories used to describe them – that one is better than the other. Hence they put together an empirical research program aiming at investigating comparatively the applied level propositions derived from the two paradigms. As they advanced on the theoretical and

empirical paths, the methodological dimension grew naturally. It represents a third facet of their distinctive school, as they had to develop a series of instruments and approaches calibrated to the specific problems and phenomena they had to engage with, as well as to the collaborative, team-based type research that they favored.

Theories of Institutions and Governance

On the theoretical side, the starting point of the Bloomington school was the development of a particular form of institutionalism based on the public choice taxonomies of goods and services (framed by the twin dimensions of "exclusion" and "jointness of use or consumption"). Compared to other schools of institutional theory (each emphasizing as a distinctive feature of their approach, either transaction costs, or agent-principal relationships, or property rights, or rent seeking etc.), the Bloomington scholars – without denying the relevance of the other factors – moved to the forefront the nature of the goods and services, considered the main entry point into institutional analysis (Ostrom and Ostrom 2004). The diversity of institutional arrangements could be thus seen as driven by a functional structure shaped by the nature of goods or services that the institutions in case are supposed to deliver by solving collective action problems under circumstances characterized by diverse configurations of transaction costs, agent-principal relationships, property rights, rent-seeking incentives, etc. Given the contextual variety of factors, the emergence of institutional diversity is natural, and the study and theorization of institutional diversity has become an inherent feature of the Bloomington perspective.

Another distinctive theoretical attribute of the Bloomington School has been the development, around the concept of "polycentrism," of a theoretical framework for the study of complex and dynamic governance systems, characterized by institutional diversity and social heterogeneity. Polycentricity, understood as a pattern of order defined by overlapping, competing, and cooperating centers of decision-making at different levels, all operating under the sway of an overarching system of laws and norms, has been theorized in the Bloomington school tradition both as a positive (explanatory) and as a normative theoretical tool. The analysis and assessment of polycentric systems and governance forms entailed the development of an entire set of theories and models such as: Competitive governance (a process set in motion by polycentric structures); Coproduction (the situation in which the quality or even the very production of a good or service is dependent on the consumer's participation in the production process); Public Entrepreneurship (conceptualized as a function emerging in solving collective action problems in competitive governance situations), Citizenship (a model of social actor having a specific profile and a set of capabilities operating as coproducer of governance in polycentric arrangements); Self-governance (as a normative ideal made possible by polycentric systems), etc. All of the above are pointing out not to a single, most efficient pattern of organization, but to a continual search for relatively more effective ways to perform, as well as to the institutional and social conditions that are shaping that search.

Empirical Research

On the empirical side, the Bloomington scholars have developed, starting at the end of the 1960s, a series of path-breaking research projects dedicated to the comparative study of metropolitan governance in the US, featuring detailed investigations of domains such as police services, water supply, and education and health services. They were also pioneers in the study of public entrepreneurship, public economies, and the "neither markets nor states" domain of institutional diversity emerging at the interface between the private and the public spheres. All these lines of empirical research assumed and implied an ongoing investigation of the production, financing, distribution of goods and services, and of the various problems of collective action situations associated to them. Consequently, Bloomington was increasingly recognized as a major center for collective action research. From all these, grew in the 1990s the program exploring the issue of the commons and

the problem of governing the commons, for which the Bloomington school is best known to the larger public today (Ostrom 1990). That has further reinforced and lead to new inquiries on topics such as: fisheries, forests, irrigation systems, pastures, natural resources management, environmental governance, foreign aid, and knowledge management and governance, making out of Bloomington one of the leading public choice and institutionalist theory empirical research centers in the world.

Methods and Approaches

The challenges created by their empirical and theoretical agenda have led the Ostroms and the scholars associated with them to craft a series of methodological tools and to cultivate an acute awareness of the epistemological problems posed by social science methodology. The metropolitan governance debates motivated them to imagine new ways of measuring and evaluating the delivery and quality of public goods and services, together with the citizens' levels of satisfaction in their consumption. The investigations on common pool resources have familiarized them with the case study research and fieldwork in diverse social and cultural (including non-Western) settings. The study of polycentric institutional arrangements has confronted them with the methodological complexities intrinsic to the multiple levels of analysis (Ostrom 2005).

In their effort to reflect upon, articulate, and codify their research practice, the Bloomington School scholars have come to distinguish between frameworks, theories, and models. A framework identifies the elements and relationships among the elements that need to be considered for analysis – a guideline pointing to the variables to be potentially considered in all types of institutional arrangements. Theories focus on specific elements of the framework, making particular assumptions and hypotheses about those elements and the relationships between them, while models make even more precise specifications about a limited set of parameters and variables, given a theory or a set of theories within a broader framework. In this respect, a special contribution of the Ostroms has been the development of a framework for the study of institutional arrangements and collective action processes, the IAD (Institutional Analysis and Development) framework: a multitier conceptual map for the identification of action arenas, the resulting patterns of interactions and the ensuing outcomes, as well as for evaluating those outcomes. Last but not least, the Bloomington school has both practiced and theorized the multiple and mixed-methods approach, a "working together" philosophy of social research, based on teamwork and the division of intellectual labor aiming to capture and channel in systematic ways the researchers' complementarities of skills and specialization.

A Philosophy of Self-Governance

In addition to all of the above, the empirical, theoretical, and methodological research of the Bloomington school has always been associated to a broader vision, which advances a philosophy of social order and change centered on the "human condition" and the artifactual reality created by fallible but capable human beings in their process of evolution. This facet of the Bloomington school, especially developed in the writings of Vincent Ostrom, combines the distrust and skepticism regarding the "seeing like a state" stance in social and policy analysis, with the advocacy of a "seeing like a citizen" attitude grounded in a deep commitment to democracy and self-governance as normative ideals. The contribution of the Bloomington School – insist repeatedly the Ostroms – should be seen as part of an intellectual tradition which included The Federalist and the Tocquevillian perspectives, as well as the revolt against the Wilsonian Administrative State, the institutional embodiment of the high modernist "seeing like a State" stance in political and governance affairs.

If that is the case, then the crucial question, explains Vincent Ostrom, is the following: "If you and I are to be self-governing, how are we to understand and take part in human affairs?" (Ostrom 1997, 117). To answer it, he wrote, we need to articulate a view "... in which a science

and art of association rather than a science of command and control is viewed as constitutive of democratic societies. This fundamental difference of perspective has radical paradigmatic implications in addressing the question ‘Who govern?’ in the plural rather that ‘Who governs,’ in the singular. A minor distinction in language may have radical implications for theoretical discourse in the same way that a shift in perspective from a revolving sun to a spinning and orbiting earth had profound implications for many different sciences, professions, and technologies” (Ostrom 1997, p. 282).

Cross-References

- ▶ Constitutional Political Economy
- ▶ Governance
- ▶ Public Choice: The Virginia School

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Böhm, Franz

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Abstract

The purpose of this entry is to delineate the political economy and legal philosophy of Franz Böhm. To reach this goal, a history of economics approach is harnessed. First, the entry concisely reconstructs Böhm’s life, intellectual evolution, and public impact. Second, it presents the specificities of his theories of market power, of competition as a disempowerment instrument, and of private law society.

Biography

Franz Böhm (1895–1977) was a German legal scholar who co-initiated the Freiburg School of ordoliberalism, but also a key political figure during the postwar decades of the Federal Republic in asserting the politico-economic agenda of the Social Market Economy in general and of antitrust legislation in particular. This introduction aims at embedding Böhm in his time and at depicting his role in several contexts in science as well as at the interface between science and society, before subsequently turning to his contributions to political economy and to legal philosophy.

Böhm was born in Konstanz and grew up in the capital of Baden, Karlsruhe, in the family of a high government official and later minister of education. After participation in the war, he studied law at Freiburg and, before finishing his dissertation, left for Berlin in 1925 to join the antitrust section of the Ministry of the Economy. In 1931, Böhm returned to Freiburg to finalize his dissertation and to subsequently start a habilitation project. The dissertation became the cornerstone of his habilitation, “Competition and the Struggle for Monopoly,” submitted in April 1933 and reviewed by the lawyer Hans Großmann-Doerth (1894–1944) and the economist Walter Eucken (1891–1950) (Eucken-Erdsiek 1975, pp. 12–14; Vanberg 2008, pp. 43–44). Both assessed Böhm’s piece as a success: Großmann-Doerth praised Böhm’s attempt to justify the seminal role of “performance-based competition” against the anticompetitive pressure groups within the industry, while Eucken applauded Böhm’s efforts to base his legal case on economic theory (Hansen 2009, pp. 46–48). With the almost immediate start of joint seminars, the three scholars established what later became known as the Freiburg School

of Ordoliberalism or as the Freiburg School of Law and Economics (Böhm 1957; Vanberg 1998, 2001; Goldschmidt and Wohlgemuth 2008a). Their cooperation steadily intensified, and the book series "Order of the Economy" initiated in 1936 constituted a milestone – its introduction under the title "Our Mission" became the programmatic manifesto of the incipient ordoliberal understanding of the role of law and economics in science and in society (Böhm et al. 2008; Goldschmidt and Wohlgemuth 2008b). Böhm received a temporary professorship at Jena in 1936, but in 1937 he was suspended from teaching after criticism of National Socialism (Vanberg 2008, pp. 43–44; Hansen 2009, pp. 88–128). Together with Eucken, he participated in the Freiburg Circles, intellectual resistance groups whose interdisciplinary discourse envisioned solutions for the age after National Socialism (Rieter and Schmolz 1993, pp. 95–103; Nicholls 1994, pp. 60–69; Grossekettler 2005, pp. 489–490).

Unlike Eucken, with whom in 1948 he co-founded the "ORDO Yearbook of Economic and Social Order," Böhm was blessed with a long life, which enabled him to become an essential figure in the politico-economic and legal developments during the early decades of the Federal Republic. Böhm's career at Freiburg in 1945 was a brief one: in the last months of the war, he received a position in the institute of the late Großmann-Doerth, became vice-rector of the university, but already in October 1945 he left to Frankfurt, the place to become focal for his further development. After a short period as advisor to the American authorities on decartelization and as minister of education, in early 1946 he received a call to the chair of private law, trade and business law at the University of Frankfurt which he would hold until 1962 (Zieschang 2003, pp. 227–228; Vanberg 2008, p. 44). Together with high administrative positions at the university, Böhm was active in Ludwig Erhard's Frankfurt-based economic administration and simultaneously worked on new proposals for antitrust legislation (Möschel 1992, pp. 62–65; Hansen 2009, pp. 264–272; Glossner 2010, pp. 104–105). From 1953 to 1965, he was member of the Bundestag, dedicating the first years especially to the protracted and tiresome debates with the Federation of German Industry (BDI) on various proposals for antitrust legislation – eventually passed and coming into effect in 1958 as the "Act against Restraints of Competition" (GWB), a fundamental document for the further development of European competition policy (Giocoli 2009). While Böhm's focus in politics was directed at antitrust law, parallel efforts regarding labor relations and inner-company co-determination are also noteworthy (Biedenkopf 1980). Acting as Chancellor Adenauer's envoy, Böhm was also a key figure in negotiating the first compensation agreements between the Federal Republic and Israel and remained important for the relations to Israel all his life (Hansen 2009, pp. 425–461).

Power in the Economy as an Enemy to Liberty

In 1928, during his years as an antitrust official in Berlin, Böhm formulated an article that would prove seminal for his further intellectual development. In "The Problem of Private Power: A Contribution to the Monopoly Debate," he extensively discussed both theoretical and practical notions regarding the power which stems from cartels and monopolies and juxtaposed this type of power with the power and coercion which stem from government, also comparing the respective abilities of private and public law to deal with them (Böhm 2008). Böhm's analysis of the legal practice of the preceding decades, following the fundamental decision of the Imperial Court of 1897 legalizing cartels and making them legally enforceable (Möschel 1989, pp. 143–145; Nörr 2000, pp. 148–156), led him to the diagnosis that the treatment of monopolies and cartels had been highly inadequate and that therapies to the ensuing problems of power concentration and "re-feudalization of society" (Tumlir 1989, pp. 130–131) were overdue – and it was both the diagnosis and the therapy which he expanded upon in his habilitation and in his contribution to the "Order of the Economy" book series (Böhm 1933, 1937). The core problem he was struggling

with was to what extent the "rules of the game" of private law should be indifferent to (or even affirmative of) power concentrations as visible in monopolies and cartels or whether special attention was to be invested in designing rules which counteract such concentrations (Sally 1998, pp. 115–116).

Competition as a Disempowerment Instrument

Böhm's key early contribution to the incipient political economy of the Freiburg School was the concept of the "economic constitution" (Tumlir 1989, pp. 135–137; Vanberg 2001, pp. 39–42, 2008, pp. 45–46). This concept not only fortified the interdisciplinary character of the scholarly community between lawyers and economists at Freiburg, but – with the semantic proximity between "constitution" and "order" – also provided a cornerstone for the development of the seminal analytical distinction of "economic order" versus "economic process," a core element of the "Freiburg Imperative" (Rieter and Schmolz 1993, pp. 103–108) which was also at the root of many debates with laissez-faire liberals, most notably Ludwig von Mises (Kolev et al. 2014, pp. 6–7; Kolev 2016).

The search for "rules of the game" of the economic order, which adequately handle the problems of private power on markets, was further augmented by Böhm on another key domain: the ordoliberal notion of competition. Böhm contributed here at least in two respects: on the nature of competition and on the role of competition. On the nature of competition, his conceptual apparatus is based upon the notion of "performance-based competition" (*Leistungswettbewerb*), a procedural view on the desirable competitive process aimed at superior performance for the customers – which can be seen as a counterweight to "complete competition" (*vollständiger Wettbewerb*), the end-state view of competition (close to the neoclassical understanding of perfect competition) also present in ordoliberalism (Vanberg 2001, pp. 46–47; Kolev 2013, pp. 63–65; Wohlgemuth 2013, p. 166). On the role of competition, Böhm innovated with his notion of *Entmachtungsinstrument*, i.e., competition as "the greatest and most ingenious disempowerment instrument in history" (Böhm 1961, p. 21) – a concept which clarifies how opening the doors of markets to competition (and keeping these doors open) creates choice options for the opposite side of the market and thus destroys the detrimental impact of power concentration.

Private Law Society

Later in his career, Böhm presented what Chicago economist Henry Simons called in the 1930s a "positive program," i.e., a vision of the desirable order as opposed to primarily negative phenomena like the issues of power. Böhm called his positive program "private law society" (Böhm 1966). This system very much resembled Hayek's legal philosophy as presented in the same period of the 1960s and 1970s, with Hayek referring to Böhm's notion in *Law, Legislation and Liberty* (Hayek 1976, p. 158). Böhm's ideal consists in creating protected domains especially of economic liberty for the individual, including the protection of property rights and enabling private contracts as cooperation of equals – domains which are to be secured by general rules of private (synonymously: civil) law (Streit and Wohlgemuth 2000, pp. 226–227; Sally 1998, pp. 115–117).

Society in Böhm's analysis is an intermediate entity between the individual and the state, but it is distinctly separate from the state, thus opposing Carl Schmitt's stance regarding the obsoleteness of the distinction between society and state (Tumlir 1989, pp. 131–132). Society is an indispensable entity: it contains the market as one of its systems, as well as the sets of rules which enable cooperation between the individuals, but also their embeddedness in and subordination to the "rules of the game" (Nörr 2000, pp. 158–160). For Böhm, private law is a historical achievement of paramount importance for a free society to overcome the privilege-based order of feudalism and to establish equality before the law – which is also the reason why he chose this name for his ideal,

since he saw the general character of private law rules as the key obstacle to the abovementioned "re-feudalization" of society of his day, i.e., the permanent struggle for power and the successful regaining of privileges (understood as the very opposite of general rules) for individuals or groups in the sense of rent-seeking, in his analysis the greatest threat to the order of a free society of equals (Zieschang 2003, pp. 107–117).

Böhm's impact and heritage go beyond the realm of ordoliberalism and the Social Market Economy. In addition, he was highly successful in being formative for generations of younger legal scholars, as becomes evident from the contributions in the numerous Festschriften and edited volumes dedicated to him (Mestmäcker 1960; Coing et al. 1965; Sauermann and Mestmäcker 1975; Konrad-Adenauer-Stiftung 1980; Ludwig-Erhard-Stiftung 1995) as well as from a special issue of *The European Journal of Law and Economics* in 1996 (Backhaus and Stephen 1996).

Cross-References

- ▶ Austrian School of Economics
- ▶ Constitutional Political Economy
- ▶ Eucken, Walter
- ▶ European Union Anti-cartel Policy
- ▶ Hayek, Friedrich August von
- ▶ Mises, Ludwig von
- ▶ Ordoliberalism
- ▶ Political Economy
- ▶ Röpke, Wilhelm

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B

Bondholder's Trustee

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Abstract

The bondholder's trustee is an agent that will manage the bond contract between the issuer and the investors. The main reason for the existence of the bondholder's trustee is to reduce the general conflict of interests between debtholders and shareholders. Another important role of the bondholder's trustee is in the case of default, because reducing the expected costs of financial distress may decrease potential losses incurred by the bondholders. However, only recently the inadequacy of the current bondholder's trustee in different legal cultures has been criticised and, in the German case, also amended.

Definition

A bondholder's trustee is an agent – normally a financial institution – that has been empowered by

a bond issuer to act on behalf of the bondholders collectively.

The main duty of the bondholder's trustee is to manage the contract between the bond issuer and the investors that purchase the bond, in compliance with any governmental regulations that may apply. That is, the trustee may collect the initial payments from the investors and manage the interest and capital payments made by the issuer in accordance with the terms and conditions of the bond issue. The trustee will also periodically inform the bondholders about the economic and financial conditions of the issuer. Another important function of the trustee is the management in case of the default of the issuer, both for a failure of the bond payments – the capital and/or the interest – and when the issuer fails to respect particular terms of the contracts, the covenants. Covenants are specific clauses in debt contracts that regulate business policy and, when violated, provide debtholders the possibility of putting precise actions into force. Normally, these actions are the renegotiation of the conditions of the debt, i.e., the costs or the maturity, or the anticipated refund of the debt.

The main reason for the existence of both the bondholder's trustee and covenants is to reduce the agency costs of public corporate debt borne from the general conflict of interests between debtholders and shareholders (Jensen and Meckling 1976; Viswanath and Eastman 2003; Bazzana and Palmieri 2012). In fact, especially given a higher value of debt, the managers of a firm may make some decisions in favor of the shareholders that damage the debtholders, reducing the firm's value. Such actions result in wealth transfer from the debtholders in favor of the shareholders, which may also be partially controlled by a bondholder's trustee. Myers (1977) and Smith (1993) identify four main sources of conflicts: (*i*) dividend payments, (*ii*) claim dilution, (*iii*) asset substitution, and (*iv*) underinvestment (Bratton 2006). In the first case, when a firm is in financial turmoil, shareholders do not have incentives to invest and tend to withdraw liquidity from the firm, selling assets and consequently increasing dividend distribution. Claim dilution concerns the negative impact of a new debt on the value of the old debt. The cost of debt depends on the risk of the firm, so the spread in every debt issue only incorporates the firm's current risk. The spread is normally fixed during the maturity of the debt, whether it be bonds or loans. Therefore, if a firm with a new issue increases the level of debt and, consequently, the level of risk, the spread of the old debt does not incorporate this new risk, leading to a decrease in the value of the old bond. The case of asset substitution depends on the shareholders' limited liability. When a firm is in financial distress, the shareholders may lose the net capital only and thus may decide to sell the firm's assets and substitute them with a riskier project. The total risk of the firm increases, but due to the asymmetry of its distribution, only the debtholders suffer from its increase, leading to a transfer of wealth. Finally, the case of underinvestment occurs when the shareholders decide not to undertake profitable investment projects. This event may occur because when the firm is in financial distress, the debtholders will obtain most of the benefits of the profitable project.

The agency costs of other types of debts, private debt (bank loans) and foreign public debt, are reduced without the use of the trustee and, in the latter case, without the use of covenants as well. In the case of private debt, the bank may collect more information and may process it in a more efficient way with respect to the case of public debt, reducing agency costs (Diamond 1984). The bank may also ask the firm to provide a guarantee in the form of collateral (Berger and Udell 1990). In addition to such methods, the bank may add some covenants to the loan contract to reduce the agency costs of debt (Demiroglu and James 2010). In the case of sovereign public debt, also in response to problems arising from the default of Argentine bonds – the unanimous approval of all bondholders on the change of the payment terms – the solution was the universal adoption of collective action clauses (CACs). With CACs only a qualified majority of bondholders is necessary to amend the payment terms that are binding also for nonparticipating bondholders (Haldane et al. 2005; Haeseler 2010).

However, it is in the case of default or in the case of technical default – the violation of a covenant – that the bondholder's trustee has the

most important role. Because the expected costs of financial distress have a negative impact on the value of the firm and, consequently, on the value of the bonds, reducing these costs may decrease potential losses incurred by the bondholders (Elkamhi et al. 2012). One of the costs that may be reduced by the bondholder's trustee is coordination costs, which depend strictly on the number of bondholders of every bond issue. In fact, if the bondholders are widely dispersed, they face serious difficulties in coordinating action, and because of the small claims, they have no incentive to solely bear the monetary and time costs to reduce dispersion. The bondholder's trustee, acting on behalf of the bondholders, may play a crucial role in reducing these costs (Bazzana and Palmieri 2012; Bazzana and Broccardo 2013).

However, only recently following the growing incidence of default on corporate bonds, the inadequacy of the current bondholder's trustee in different legal cultures has been criticized and, in the German case, also amended. According to Anglo-American norms – under the Trust Indenture Act in the United States – an "indenture trustee" (the bondholder's trustee) must be appointed for all public bond issues greater than 10 million dollars. Before a default, the responsibilities of the indenture trustee are very simple: distributing payments to investors, monitoring covenants, and other ministerial duties. If a default (including a technical default) occurs, the indenture trustee must act as a "prudent man" on behalf of the bondholders. This rule, especially during a default, is not simple to follow: for some actions such as changing the primary characteristic of the bond, e.g., its maturity, principal, or interest terms, unanimous bondholder consent is necessary. Also for these reasons, some solutions have been proposed to increase the power of the indenture trustee (Amihud et al. 2000), as have some alternatives that make similar adjustments (Schwarcz and Sergi 2008).

Also in Italian law, the capacity of the *rappresentante comune* (common representative) of the *assemblea degli obbligazionisti* (bondholder's meeting) – delineated in the Italian Civil Code – to manage the default situation efficiently is limited. In fact, before the default, the information ability of this legal institution was very limited; for example, access to the company's financial documents was restricted, and after the default, the length of the procedure and the different quorum needed to resolve the bondholder's meeting may significantly postpone a formal decision. A possible solution to solve such inconveniences that follows the idea of Amihud et al. (2000) for Anglo-American norms and does not change the Italian Civil Code may be the use of the new hybrid contracts introduced in Italy with the 2003 corporate law reform (Bazzana and Palmieri 2012). It is possible to insert in these debt instruments mandatory representation to provide an investment firm the ability to act with full power on behalf of the bondholders, especially in default situations.

The German situation is different because German bondholder legislation was changed in 2009 with the introduction of the Debt Securities Act, which amended the Debt Securities Act of 1899. The representative structure is similar to those used in Italian law, featuring a bondholder meeting and the *Gemeinsamer Vertreter* (common representative), but with a greater power. In fact, under the German structure, the bondholder meeting may reach a binding majority decision regarding the bond's primary characteristics, such as changing the maturity or reducing the principal, with only a qualified 75% majority. The new law also facilitates the exclusion of individual bondholders' actions.

Cross-References

▶ Banks
▶ European Integration
▶ Law and Finance

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Bosman Ruling

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Abstract

This entry explains the Bosman case and the Bosman ruling. I focus on the judicial process itself and on the decision of the European Court of Justice. The application of the Bosman ruling and its initial obstacles are also described. Finally, I present the consequences and implications of that ruling.

The Bosman Ruling

The Beginning of the Bosman Case

The indefatigable fight of an hitherto-unknown Belgian midfield football player, Jean-Marc Bosman, who spent the last years of his professional sporting life going from court to court in defense of his rights, achieved one of the most recognized decisions of the European Court of Justice (for a revision of the ECJ, see Vauvel 2014), known as the Bosman ruling. Jean-Marc Bosman was a 25-year-old professional player in the RFC Liège when his contract expired in June 1990. He tried to force a transfer to another club, but under the rules of the Belgian Football Association and the UEFA (Union of European Football Associations), even with a contract complete, clubs could still charge a fee for a player to move as compensation for training expenses. The Belgian club demanded a fee for its player that appeared to be far out of reach for the French club, the USL Dunkerque, who were interested in signing the Belgian player. The impossibility of agreement between the Belgian and the French clubs prevented J.M. Bosman from playing in France in August 1990. After Bosman's unsuccessful transfer, he took legal action.

That was the beginning of the Bosman case, which beat the system of modern football. The judicial process was long, and it did not end in the Belgian courts because the case involved an international, cross-border employment dispute. He brought his case to the ECJ in Luxembourg, against the Belgian Football Association, RFC Liège, and UEFA (Union Royale Belge des Societes de Football Association ASBL & Others vs. Jean-Marc Bosman, ECJ Case No.: C-415/93 (1995) ECR I-4921), citing the 1957 Treaty of Rome, which guaranteed the freedom of movement of workers across European Union (EU) countries (for a revision of the European Community Law, see Heine and Sting 2015). Five years of legal battle was finally settled on December 15, 1995, when the ECJ ruled in his favor. The ECJ extended the application of Article 48 (on the prohibition of country restrictions of the free movement of workers) to the private sector. The Bosman ruling established that a player shared every other worker's right to move to an employer in another EU country without impediment. The ruling of the ECJ involved the liberalization of the migration of professional sportsmen and sportswomen within the EU and

the abolition of transfer fees after the expiration of contracts (Antonioni and Cubbin 2000). The restrictions on the number of EU players any club could field were also deemed illegal under the Bosman ruling.

During the whole judicial process, UEFA resolutely opposed Bosman's arguments. UEFA's proposition was that sporting activities constitute an exception to the provisions of the Treaty of Rome, since they could not be considered as economic activities and therefore were not subject to the Treaty regarding freedom of movement. With respect to transfer fees, UEFA argued that there should be compensation for the training and development of players since, if it did not exist, it would not be worth investing in young players (Marcén 2016). The ECJ rejected UEFA's arguments since, as the Court explained, transfer costs after a contract expiration are not the only means to assure the training and development of young players. UEFA ended up accepting the Bosman ruling in March 1996.

The Application of the Bosman Ruling and its Consequences

The application of the Bosman ruling was not exempt from certain difficulties. EU national leagues and international competitions were in the midst of the 1995/1996 season in Europe. In order to avoid the alteration of the competitions, with the transfer window closed in many countries, there was an agreement, known as "the gentlemen's agreement," which involved completion of that season (1995/1996) with the rules under which it had begun, that is, applying "rule 3 + 2." This meant that only three nonnational players could be fielded, plus two additional foreign players who had played professionally in the host country for a period of five uninterrupted years, including 3 years in junior teams. No club violated that agreement during that season. In the next season, 1996/1997, the free movement of EU national football players and the abolition of transfer fees after the expiration of contracts were applied without exception (Marcén 2016).

The Bosman ruling resulted in more freedom of contracts and fewer restrictions on the mobility of players (Feess and Mühlheusser 2002), and the economic implications have been examined by several researchers. In the post-Bosman period, an unsurprising increase in player migration in professional football has taken place (Frick 2009). EU players after the ruling were not considered foreigners, making signing them more attractive. In addition, Bosman's victory made nonnational EU players more attractive to be signed up, since the nationality quotas were no longer applicable to EU national players. These movements internationalized the squads, although the effect of the Bosman ruling appears to vary over time (Marcén 2016). In the immediate aftermath of the ECJ ruling, the clubs had some limitations on signing new players, since most players still held contracts. In the case of the English Premier League, it took around 2 years until the number of its non-British players rose significantly (Lowrey et al. 2002). Additionally, not all clubs had the ability to scout foreign players at the time of the Bosman ruling, which generated some doubts about the signing of players, which, once again, delayed the impact of the ruling.

After overcoming the initial obstacles, clubs could – and did – field teams without a single native player. The arrival of the new players had an impact on the quality of the football leagues (Ericson 2000; Flores et al. 2010). As suggested in Álvarez et al. (2011), foreign players produced an improvement in the skills of the local native players through contact with new techniques and practices, which could then further improve the quality of the national teams (Binder and Findlay 2012). Other researchers have pointed out that the Bosman ruling decreased the competitive balance (Kesenne 2007; Vrooman 2007). The increasing demand for international players because of the open access to EU national football players, but also because of the elimination of transfer fees after the expiration of contracts, which decreased the costs of signing up international players, forced clubs to pay higher wages (Kesenne 2007) for nonnative players and native players alike, to deter the best players from leaving. This was possible, partly, through the dramatic increase

in television revenues, but this would not remain the case forever. With the power in their hands, players saw their wages go through the roof. With the decrease in TV revenues, and without the transfer fees that smaller clubs received in the pre-Bosman period, only the larger and richer clubs could afford to pay the salaries of the superstar football players. The small clubs also lost the incentives to develop home-grown talent, since their best young players could leave for free at the end of their contracts. Then, other consequence of the Bosman ruling was that, within each national competition, the differences between the small and the big clubs greatly increased. Similarly, the decreasing competitive balance was also observed across EU countries between the "Big 5" leagues and the rest of the European national leagues.

Nonetheless, the dynamic analysis of the impact of the Bosman ruling on the participation of native players in their national league, presented by Marcén (2016), using Spanish data, reveals that the impact of the Bosman ruling was greatest three or four seasons after the Bosman ruling, in line with the argument that the clubs had some initial restrictions, but after seven or eight seasons, no effect can be observed. This can be explained by a readaptation of the clubs and players to the conditions of the post-Bosman labor market. As explained by Antonioni and Cubbin (2000), the bargaining power of the clubs could be, at least in part, recovered by maintaining relations with their player under what Dietl et al. (2008) call the "shadow of the transfer system," by excluding the advent of contract expiration through extended contracts. With the Bosman ruling, clubs did not lose the power to decide who is fielded, and so the threat of no play in any match in the whole season (imposed when players do not accept a new contract before the expiration of their existing contract) was credible and led many players to accept the renewal of their contracts.

The impact of the Bosman ruling is everywhere in the modern-day sport. The principles applied in the Bosman case extended to other non-EU nationals, those originating from "third countries," making them equal to European Union players (Hendrickx 2005). There are several examples of sportsmen attempting to attain Bosman objectives, such as Kolpak, a Slovak handball player in the German handball league. In 2000, Slovakia was not a member of the European Union, and therefore the Bosman ruling did not apply to its citizens. However, Slovakia had an Association Agreement with the European Union. Based on that agreement, in 2003 the European Court of Justice ruled in favor of Kolpak (Case C-438/00, Deutscher Handballbund v. Maros Kolpak), giving equal rights for Slovak sportsmen residing and lawfully employed by a club established in a Member State and EU players (Marcén 2016). The Russian Simutenkov and the Turk Nihat, football players participating in the Spanish League, also obtained rights equal to EU players in 2005 and 2008, respectively (Hendrickx 2005; Penn 2006). Even after more than 20 years of the Bosman ruling, its shadow has not disappeared, since it is unclear how the pending exit of the United Kingdom from the European Union, known as "Brexit," will affect the mobility of workers and the large number of foreign players participating in the English Premier League.

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Bounded Rationality

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Abstract

Bounded rationality (BR) is the idea that when individuals make decisions, they are "bounded" or limited because of inadequate information, cognitive limitations inherent in the human mind and time constraints. This type of rationality describes broad areas of social and economic action, in which rational utility-maximizers faced with complex situations are required to make less-than-perfect choices (satisficing rather than optimizing). BR is one of the cornerstones of rational choice theory and it informs many scientific fields, spanning from mathematic and economic psychology to political economy and managerial economics. This entry discusses the general aspects of BR, focusing on how cognitive biases affect the decision-making of rational agents faced with the costs of acquiring, absorbing and processing information. It also presents an overview of BR's current applications in various fields of economic activity.

Definition

Bounded rationality (BR) is the idea that when individuals make decisions, they are "bounded" or limited because of inadequate information, cognitive limitations inherent in the human mind, and time constraints. This type of rationality fittingly describes broad areas of social and economic action in which rational utility-maximizers faced with complex situations are required to make less-than-perfect choices (satisficing rather than optimizing). The term was coined by the US economist and Nobel laureate Herbert Simon who proposed it as a more realistic version of the "perfect rationality" assumed by the neoclassical model (Simon 1982).

General Aspects of Bounded Rationality

BR is one of the cornerstones of rational choice theory (Simon 1955; Tversky and Kahneman 1986; Heap et al. 1992). Although its origins can be traced back several decades (more specifically, to the early stages of game theory), the modeling of human behavior in terms of choice flourished into a challenging new area of interdisciplinary research with the work of pioneering cognitive psychologists and behavioral economists in the early 1980s (Tversky and Kahneman 1981; Güth 2000). Today BR informs and populates many scientific fields, spanning from mathematic and economic psychology to political economy and the law.

According to Simon's original thesis, rational actors function under three insurmountable obstacles, which limit their potential to reach "perfectly" rational decisions: (1) only incomplete and often unreliable information is available regarding possible alternatives and their consequences, (2) the human mind has a reduced capacity to evaluate and process available information,

and (3) in many situations, only a limited amount of time is available in which to make a decision. These three limitations constitute the core around which contemporary BR theories have been developed.

Imperfect information or information overload affects the decision-making of all agents who are faced with the costs of acquiring, absorbing, and processing information, e.g., consumers (Reis 2006), managers (Basel and Brühl 2013), judges (Tsaoussi and Zervogianni 2010), and spouses-to-be (Garcia-Retamero et al. 2010). The problem is aggravated when rational actors enter into contracts. Time limitations serve to enhance the impact of the previous two factors. The outcome in the social world is the increase in the frequency of systematic errors in judgment but also the intensity and gravity of errors. Hence, the scientific study of how humans make suboptimal decisions overlaps extensively with the study of why humans make mistakes. BR models have been proposed to study the behavior of NGOs, global investors, teachers, bankers, and even soccer players and goalkeepers.

The limitations of human cognition are known as "cognitive biases." The basic premise is that because the human brain cannot process all information, it routinely makes mistakes and it resorts to heuristics in order to make decisions (Baron 2007). The current literature covers an impressive array of cognitive biases. Behavioral biases, decision-making biases, and belief biases represent a main strand of research, both in social psychology (Kahneman 2003) and behavioral economics. Examples include the anchoring effect (the tendency to rely too heavily, or "anchor," on one trait or piece of information when making decisions, usually the first piece of information that we acquire on that subject), the bandwagon effect (the tendency to do or believe things because many other people do or believe the same), and the framing effect (drawing different conclusions from the same information, depending on how or by whom that information is presented). Memory biases form another broad category within the cognitive bias family. Finally, social biases have been shown to impact decision-making. Characteristic examples include in-group bias (the tendency of individuals to give preferential treatment to those they perceive to be members of their own group) and the "just-world phenomenon" (the tendency for people to believe that the world is just and therefore people get what they deserve).

Heuristics are experience-based cognitive shortcuts which humans have taken throughout history when problem-solving, discovering, and innovating. They are most helpful in settings when information is too costly or difficult to obtain. The best-known example is the availability heuristic, a mental shortcut that relies on immediate examples which come to mind. Heuristics involve making judgments on the basis of simple, fast, and efficient rules-of-thumb. Criticism has been leveled at decision theorists for straying from Simon's original thesis and emphasizing the inability of individuals to optimize. Instead of searching for theoretically optimal models, it has been shown that simple heuristics help agents reach wiser decisions (Gigerenzer and Reinhard 2001). Simple heuristics that use limited information have been successfully applied to environments from stock market investment to judging intentions of other organisms to choosing a mate (Todd 2007). Behavioral economists are equally optimistic, having faith in the power of heuristics to increase the effectiveness of decision-making. A popular idea is that choice architectures may be modified in light of agents' BR and that decisions which affect health, wealth, and happiness may be "improved" (Thaler and Sunstein 2008).

Specific Applications of Bounded Rationality

The applications of BR in economics are as rich as they are diverse (Rubinstein 1998). Over the last few decades, BR research has spilled over into other scientific disciplines, covering the full spectrum from brain research and preventive medicine to the role of emotions, ecological economics, and education policy. A sizable portion of the existing literature is theoretical-normative in scope and nature, consisting of two types of published

articles: those which function as critical reviews of BR or the perfect rationality hypothesis or both, and those which introduce new theories aspiring to expand the borders of the existing paradigm. However, BR has attracted the attention of many economists who conduct mostly empirical work and inject the field with the dynamic energy of their methodologies. There is also a plethora of articles combining theory and empirical research, and many of them fall within the larger "game theory" umbrella.

Game theoretical models that test several parameters of BR in different settings abound in recent years (Stahl and Haruvy 2008). To name one, a pivotal issue in game theory is that of the "finite horizon paradoxes." The most noticeable examples are the finitely repeated Prisoner's Dilemma game (Rapoport and Dale 1967), Rosenthal's centipede game (Rosenthal 1981), and Selten's chain store paradox (Selten 1978). In these games the standard game theoretic solutions (the application of backward induction and subgame perfection) yield results that are counterintuitive and inconsistent with traditional equilibrium analysis. The paradoxes are explained only by the players' lack of full rationality (Rosenthal 1989). The very popular Prisoner's Dilemma game and the less known centipede game both present a conflict between the players' self-interest and mutual benefit. If it could be enforced, both players would prefer to cooperate throughout the game. However, a player's self-interest or both players' distrust can interfere and create a situation where both do worse than if they had blindly cooperated. Selten's chain store paradox introduces a three-level theory of decision-making where decisions can be made on different levels of rationality.

Another thread of BR research deals with Stackelberg games, which are natural models for many important applications involving human interaction, such as oligopolistic markets and security domains. Here one player (the leader) commits to a strategy, and the follower makes her decision knowing the leader's commitment. Existing algorithms for Stackelberg games efficiently find optimal solutions (leader strategy), but they assume that the follower plays optimally. Nevertheless, in many instances, agents face human followers (adversaries) who may deviate from their expected optimal response because of the cognitive limitations in observing the leader strategy (Pita et al. 2010).

The problem of imperfect information has been addressed by law and economics scholars in a growing body of literature which has extensively explored asymmetry of information in contracts, in various markets, and in particular manifestations: adverse selection, moral hazard, and the principal-agent problem. The basic premise is that no buyers can accurately assess the value of a product through examination before sale is made, and all sellers can more accurately assess the value of a product prior to sale (Akerlof 1970). Applications in economic life are plentiful. To use an illustrative example, moral hazard is viewed as a root cause of the subprime mortgage crisis in the USA which, according to economic analysts, triggered the 2008 recession.

Another "classic" BR application is in financial markets. Misperceptions of risk have been identified in empirical work as one of the major causes of the global financial crisis and related phenomena such as the bank run and stock market crashes. Satisficing (the fact that satisfactory decisions are chosen over the best decisions) is widely applied in marketing. Also, BR models can help reduce uncertainty in supplier selection decisions (Riedl et al. 2013). BR models have been developed to investigate the origin and structure of loss aversion and optimism in marketplaces (Yao and Li 2013).

In recent decades, economic organization has been increasingly approached under the lens of BR models (Foss 2001). Theorists from institutional economics (Williamson 1985; Hart 1995) have looked at the role of BR in the formation of contracts, attributing (e.g., Gifford 1999) contractual incompleteness to the trade-off between devoting scarce attention to managing existing contracts and writing new ones. The key assumption of BR in organizational economics is that managers are fallible, so they commit errors of evaluation (Sah and Stiglitz 1985). More recent analyses focus on the effects of first-mover advantage on organizational size and structure, finding,

for example, that smaller and decentralized organizations are preferable since they are speedier in making decisions. Following Simon, who often used BR in context with the theory of the firm, later models focused on BR as limited attention that needs to be economized and tested for different organizational responses to it. BR has also been applied to observe market fluctuations.

Finally, the BR assumption has proven fruitful in managerial economics. Some approaches (e.g., Tisdell 1996) draw on game theory, transaction costs theory, and evolutionary economics to critically examine decisions made by individuals, taking into account learning possibilities, and decisions by groups and economic organizations, studying optimal communication within organizations. Others study managerial decision-making in international business under the prism of BR, focusing on the role of decision-makers in foreign direct investment and related strategies (Aharoni et al. 2011).

The increased attention devoted by economists to BR assumptions has allowed them to make more accurate predictions about human behavior. BR analyses have enriched mainstream economic thinking, suggesting improvements to existing regulatory and policy frameworks. The main BR hypothesis and its implementation in different areas of economics have added sophistication to the classic view of human rationality, infusing it with greater adaptive power to the rapid technological changes of the new information society. Furthermore, by inquiring into the logic guiding the action of economic agents in complex interactive systems such as markets and games, BR proposes normative insights to rational actors about how to make better decisions. Lastly, through the looking glass of BR, legislators are able to minimize the negative unintended consequences of lawmaking, judges can reduce judicial error, and lawyers can more efficiently represent the interests of their clients.

Cross-References

▶ Behavioral Law and Economics
▶ Games
▶ Good Faith and Game Theory
▶ Rationality

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Broken Window Effect

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Abstract

The broken windows effect refers to the hypothesis that there is a positive effect of urban disorder on the incidence of more serious crimes, where the term "broken windows" represents a range of disorders within communities. The hypothesis has been the subject of an intensive academic debate and has had an important effect on law enforcement in the USA, where it increased the focus on community policing and zero tolerance. This essay reviews the evidence for the existence of the broken windows effect and the effectiveness of the associated policing strategies.

Introduction

James Wilson and George Kelling coined the term "broken windows effect" (BWE) in a magazine article in 1982. They argued that broken windows, a catch-all term for disorder and incivility within a community like graffiti, vandalism, littering, etc., can lead to further disorder and increases in criminal behaviour. Their argument originated in experiences with Newark police practices and also referenced an "experiment" by Stanford psychologist Zimbardo (1973), who abandoned cars in different neighborhoods and in various states of disrepair to study their subsequent vandalization.

Kelling and Wilson (1982) asserted that broken windows send a signal of indifference and lack of enforcement, leading to increased fear of crime and weakening of social controls, thus paving the way for bigger transgressions. To prevent such processes, the authors argued that it is crucial for the police to engage in the prevention and policing of disorder and minor crimes like panhandling.

The BWE had a substantial influence on the practice of law enforcement in several major US cities, inducing a shift to disorder policing and "zero tolerance". Specifically, in 1993, under the guidance of Police Commissioner William Bratton and Mayor Rudolph W. Giuliani, New York City (NYC) implemented an enforcement strategy designed to "reclaim the public spaces of New York" (Bratton and Knobler 1998, p. 228). This led to a more than 50% increase in arrests for misdemeanors, without a substantial increase in reporting of misdemeanors (Harcourt 1998).

These police initiatives coincided with a large drop in crime in NYC, sparking a vigorous debate involving both academics and practitioners (Eck and Maguire 2000). Proponents of the BWE argue that the initiatives like those in NYC described above were at least partly responsible for drop in crime (Kelling and Bratton 1998). Critics, however, emphasize rival explanations like the decline in the crack epidemic and argue that crime was decreasing in NYC prior to the implementation of novel policing strategies and decreased in other large cities without aggressive policing strategies (Harcourt 1998; Fagan et al. 1998).

Evidence

The existence of a BWE is an empirical question. In what follows, we will discuss some of the most influential contributions to the empirical debate and provide some thoughts about directions for future research.

To test the broken windows hypothesis, a number of studies have tried to establish a correlation between disorder, possibly as a consequence of variation in police strategy, and more severe crimes like robberies or violent crimes. Many studies focus on the New York 1993 crime initiative and use variations in misdemeanor arrests across precincts or boroughs as a measure of disorder. Different studies vary in the length of those time-series and the control variables used.

For instance, Kelling and Sousa (2001) use variations across NYC precincts over time with regard to both misdemeanor arrests and crime rates and demonstrate a statistically significant and substantial negative relationship between both. This result is echoed by Corman and Mocan (2005), who analyze a dataset of monthly time series citywide and control for policing variables such as felony arrests and the size of the police force.

Other studies have found smaller or no correlations between disorder and crime. For instance, Sampson and Raudenbush (1999) employed trained observers to drive through all streets throughout 196 census tracts in Chicago. They selected 15,141 street sides, which were then videotaped and coded for neighborhood disorder. The authors found that the correlations between the documented disorder and most predatory crime rates disappeared when controlling for structural neighborhood conditions like poverty.

Apart from yielding conflicting results, the correlational studies cited above (and similar ones like it) are susceptible to confounding explanations. For example, Harcourt and Ludwig (2006) attempt to replicate the findings by Kelling and Sousa (2001) and Corman and Mocan (2005) and find that the patterns are also consistent with mean reversion. That is, high spikes in crime are followed by crime drops regardless of disorder policing. Alternatively, like Sampson and Raudenbush (1999) point out, both disorder and crime may depend on unobserved neighborhood characteristics, resulting in spurious correlations.

To overcome such problems, an increasing number of studies investigate the impact of experimental or random variation in disorder policing strategies. This makes it possible to exclude the confounds mentioned above and make causal statements about the effect of policing disorder on crime. For instance, Braga et al. (1999) conducted a randomized control trial, focussing on problem-oriented policing strategy to control physical and social disorder. The strategy resulted in a significant reduction in crime incidents in hotspots for violent crime, without much evidence for displacement to nearby locations.

Harcourt and Ludwig (2006) used data from an experiment carried out by the US Department of Housing and Urban Development known as Moving to Opportunity (MTO). Officials assigned around 4,600 low-income families from communities largely consisting of public housing and characterized by high rates of crime and social disorder to housing in more reputable and high-status neighborhoods (Orr et al. 2003). Assignment to the program was random, allowing identification of the impact of disorder in the new neighborhood on the relocated individuals' criminal activity, without confounding effects of

individuals' background. Harcourt and Ludwig (2006) compared the crime rates of those that moved and those that stayed in their lesser neighborhood and found that the rate of neighborhood order or disorder has no noticeable effect on criminal behavior.

Braga et al. (2015) provide a meta-analysis of 30 (quasi) experimental studies for a range of different disorder policing strategies. The authors conclude that aggressive zero-tolerance strategies against individuals do not produce significant effects on crime; however, approaches that involve the community to solve problems at particular locations tend to be quite effective. This is in line with the conclusions of an earlier review by Weisburd and Eck (2004). It also reinforces the findings of Taylor (2001), who used longitudinal data from 66 neighborhoods in Baltimore to determine the relationship between disorder and crime. On the basis of those results, Taylor argues that different types of disorder might require different policies and cautions against simple-minded crackdowns that undermine the social fabric of communities.

The differential effect of various policing strategies point to another empirical concern, namely, the identification of the different channels through which disorder can affect crime. Kelling and Wilson (1982) maintained that the effects of disorder manifest themselves through an increased fear of crime associated with neighborhood disorder. In turn, this leads to reduced social controls as people move away and are less inclined to engage in crime prevention or intervention. This sequence of events contrasts with more traditional explanations of incapacitation and deterrence associated with increased police arrests, presence contact, and surveillance.

Following this logic, Weisburd et al. (2015) argue that to test the BWE, it is not enough to look at the effect of disorder policing on crime rates without taking into account the effects on fear or crime perceptions. To do so, the authors identify six studies which allow the identification of such effects. In a meta-analysis of these studies, they do not find consistent evidence that disorder policing reduces fear of crime. Moreover, the effect sizes differ starkly across studies, and confidence intervals around the estimated effects are large, implying a need for more evidence.

Conclusion

The original formulation of the BWE by Kelling and Wilson has resulted in several decades of lively debate on the proper role of police in society and has provided a big stimulus for empirical research on community policing. Although the evidence for the BWE seems underwhelming at present, it is hard to draw firm conclusions, as much of the available research is not well suited for the identification of causal patterns, or to distinguish between the BWE and more traditional theories.

To move the discussion forward, research designs should focus on the use of random variation in policing strategies. Moreover, a better understanding of the links between disorder and crime requires investigation of the specific social mechanisms under consideration. This implies a need to formulate detailed theories from which one can derive testable hypotheses. The set of outcome variables will have to go beyond crime reports and arrest rates to include perceptions of safety, trust, willingness to intervene, and other variables related to community enforcement (Sampson et al. 1997). These studies will require careful coordination between academics and police forces. Whether the BWE turns out to be real or not, this approach will allow the evidence-based policing that makes society safer.

Cross-References

▶ Causation
▶ Cost of Crime
▶ Crime: Economics of, the Standard Approach
▶ Crime: Expressive Crime and the Law
▶ Crime, Incentive to
▶ Criminal Sanctions and Deterrence
▶ Empirical Analysis
▶ Prosocial Behaviors
▶ Public Enforcement

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Budgetary Institutions

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Abstract

Budgetary institutions encompass two different types of institutional arrangements: fiscal rules and budget process rules. Fiscal rules entail substantive constraints on public spending, taxation, deficit and debt, usually in the form of explicit quantitative targets. Budget process rules, in turn, entail procedural aspects of public budgeting: they establish the competencies of the actors involved in the budget process and outline the procedures that govern the preparation, adoption and implementation of the budget. This entry gives an overview of the different forms and characteristics of these institutions and also of their impact on budgetary outcomes.

Definition

Budgetary institutions encompass two different types of institutional arrangements: fiscal rules and budget process rules. Fiscal rules entail substantive constraints on public spending, taxation, deficit, and debt, usually in the form of explicit quantitative targets. Budget process rules, in turn, entail procedural aspects of public budgeting: they establish the competencies of the actors involved in the budget process and outline the procedures that govern the preparation, adoption, and implementation of the budget.

Introduction

Because of the recent fiscal crises in Europe and elsewhere, budgetary institutions have received more attention than ever. On the one hand, faulty

budgetary institutions have been blamed for their failure to secure fiscal discipline. On the other hand, these institutions have been viewed as triggering unnecessarily painful austerity measures. This entry gives an overview of two main types of budgetary institutions: fiscal rules and budget process rules. Fiscal rules entail substantive constraints on public spending, taxation, deficit, and debt, usually in the form of explicit quantitative targets. Budget process rules, in turn, entail procedural aspects of public budgeting: they establish the competencies of the actors involved in the budget process and outline the procedures that govern the preparation, adoption, and implementation of the budget.

Law and Economics analysis can be particularly helpful in structuring the analysis of budgetary institutions. On the one hand, Law and Economics approach can be utilized for examining more systematically the impacts of different types of fiscal rules and budget process rules on the functioning of the economy as a whole. On the other hand, Law and Economics can provide useful conceptual and analytical tools for understanding how exactly different types of budgetary institutions shape the behavior of actors involved in the budget process and what kind of factors influence the actual achievement of the goals set for these institutions. For example, Law and Economics approaches could be used for undertaking detailed examinations of how fiscal rules and budget process rules structure the incentives of the different actors involved in the budget process and how these configurations of incentives influence the actors' interactions and the adjustments in their behavior. Law and Economics perspectives could also be used for examining the actors' actual motivations for establishing fiscal and budgetary process rules and for uncovering the unintended effects of these rules.

In the next sections, both of these two approaches will be drawn upon. First, different forms and characteristics of budgetary institutions will be outlined, followed by a discussion of their impact on the behavior of the budget actors and on the fiscal outcomes (for a more detailed overview, see Raudla 2010a).

Fiscal Rules

Different Types of Fiscal Rules

Output-oriented or substantive fiscal rules, also called numerical fiscal rules, are rules that pertain directly to particular aggregate parameters of the budget. Kopits and Symansky (1998, p. 2) define a fiscal rule as "a permanent constraint on fiscal policy, expressed in terms of a summary indicator of fiscal performance." The four main types of fiscal rules are deficit rules (e.g., balanced budget requirements or deficit limits), debt rules (e.g., debt ceilings), expenditure rules (e.g., ceilings on general public expenditure growth or on certain types of government spending), and tax revenue rules (e.g., limits on the increase in the overall tax burden) (Corbacho and Schwartz 2007). Fiscal rules can be stipulated either in constitutions or organic budget laws (framework laws governing budgetary decision-making of the government).

Balanced budget rules and deficit constraints have received the most extensive attention in discussions over fiscal rules thus far (von Hagen 2007). The general category "balanced budget requirement," however, may involve rather different rules in terms of scope and content (Poterba 1995). One can differentiate between balanced budget rules in three different aspects. First, the rules vary with respect to the *stage* of the budget process they apply to: the executive may be required to submit a balanced budget, the legislature may be required to approve a balanced budget or the government can be required to balance the budget at the end of the year. Second, balanced budget rules may vary in terms of the *type of funds* they cover: the rule may apply only to general funds but may also cover capital funds or special revenue funds. Inasmuch as the balanced budget rule applies only to the current budget, it is equivalent to the "golden rule," which requires that borrowing may only be used to fund investment. Third, balanced budget requirements can vary with regard to when and how the legislature can *override or suspend* the requirement: the provisions can entail specific circumstances and special majority requirements.

Fiscal rules pertaining to *tax and expenditure limits* have received relatively less attention

compared to debt and deficit rules so far, and most of the literature until recently was primarily concerned with the tax and expenditure limits (TELs) adopted in the US states during the "tax revolt" of the 1970s. Since the beginning of 1990s, a number of European countries have adopted expenditure rules, bringing about resurgence in the interest of such rules and their impacts (von Hagen 2008). Tax and expenditure ceilings can be established either in nominal or real terms, and limits can be tied to growth in personal income, inflation, or population. Expenditures can also be limited to a percentage of projected revenues, with the rest of the revenues channelled to a rainy-day fund. In terms of coverage, expenditure limits can set a ceiling on primary expenditure, wage (and pension) expenditure, interest payments, and debt service.

How Can Fiscal Rules Shape Fiscal Policy?

Fiscal rules can be expected to influence fiscal policy by enhancing the *accountability* of policy-makers and by mitigating the *common-pool problems* inherent in budgetary decision-making.

First, since fiscal rules establish clear benchmarks with which actual policies can be compared, they can be viewed as enhancing the accountability of the legislature and the executive (von Hagen 2007). If, for example, the allowed budget deficit is fixed at a certain percent of GDP, voters can use this indicator as a yardstick for evaluating the prudence of policy choices undertaken by their representatives (Schuknecht 2005). Further, fiscal rules can heighten attention to budgeting and attract closer monitoring by interested voters and interest groups.

Second, fiscal rules can mitigate the *common-pool problems* involved in public budgeting and taxation. It is often argued that the "fiscal commons" or "budgetary commons" are subject to similar tragedies as the natural commons, leading to a deficit bias in fiscal policy-making (Buchanan and Wagner 1977; Tullock 1959; Velasco 2000; Wagner 2002). The gist of the idea of budgetary commons is that the participants involved in budgeting internalize full benefits of a spending proposal but bear only a fraction of the cost, since it is financed from the common tax fund. The divergence between *perceived* and *actual* costs of programs, in turn, would lead the herders on the budgetary commons to demand higher levels of particularistic expenditures than would be efficient, leading to increasing expenditures, and, in a dynamic context, to higher deficits (for an overview of different models of budgetary commons, see Raudla 2010b). The smaller the fraction that each grazier has to bear, the smaller become the perceived costs compared with the actual costs and the more severe the common-pool problems of budgeting are likely to be. Fiscal rules are considered to enhance the coordination of budgetary and tax policy-making by providing the actors involved with a clear focal point that can facilitate the internalization of decision externalities entailed in spending or borrowing.

Trade-Offs Involved in Designing Fiscal Rules

Kopits and Symansky (1998) emphasize that if fiscal rules were to be *effective*, they should be well defined (with regard to the indicator to be constrained, institutional coverage and specific escape clauses), transparent, simple, flexible (to accommodate exogenous shocks), adequate (with respect to the specified goal), enforceable, consistent (both internally and with other policies), and efficient. They point out, though, that no fiscal rule can fully combine all these features. Hence, there are usually significant trade-offs that have to be made in establishing fiscal rules, which may underline their overall effectiveness.

The most important trade-off that has to be made in designing fiscal rules is between *simplicity* and *flexibility*. In order to strike an optimal balance between these two features, one has to keep in mind how the fiscal rule is foreseen to be *enforced* (Schick 2003). In other words, if we think that a fiscal rule is necessary, then what the best rule would be depends on what we consider to be the main enforcement mechanism for the rule. If we assume that the main reason politicians stick to the fiscal rule is that they are afraid of the *electoral backlash* when they deviate from the rule, then simplicity and transparency of the rule is a precondition for it to work. Simplicity and

transparency of a fiscal rule imply that the rule is established in a constitution and entails a straightforward numerical target which has to be achieved without any exceptions.

The main problem with such very simple rules (like is the case with the Maastricht deficit target of 3% of GDP) is that they may prevent macroeconomic stabilization via automatic stabilizers and fiscal stimulus. Hence, such a simple and transparent budget balance rule may needlessly prolong an economic downturn and this could prove self-defeating in the long run (Anderson and Minarik 2006). Conversely, during good times, a simple headline balance rule may encourage cyclically loose fiscal policies because it may not give sufficient guidance about how large surpluses the government should run.

One possible solution to alleviate pro-cyclicality in fiscal policy-making is to make the rule more flexible and to require the fiscal policy to adhere to a cyclically adjusted balance or a structural balance, which would allow possible deviations in the case of severe economic recessions and other emergencies. However, in the case of such more sophisticated rules (as outlined in the Fiscal Compact, for example) the general public may not be able to evaluate whether the government has complied with the fiscal rule or not (Alesina and Perotti 1999; Schuknecht 2005). Indeed, even economists may not be able to say with full confidence what the cyclically adjusted balance actually is at any point in time because of the difficulties and uncertainties involved in calculating the potential output and the revenue and expenditure elasticities (Larch and Turrini 2010). Indeed, the ex ante, real-time, and ex post assessments of the structural and cyclically adjusted balances may diverge significantly. Furthermore, if targets are set in cyclically adjusted terms, it may give rise to moral hazard in forecasting (Anderson and Minarik 2006).

Thus, in the case of such more "sophisticated" fiscal rules, relying on the electorate as the main enforcement mechanism is not feasible anymore. Alternative mechanisms entail enforcement by the constitutional courts, financial markets, and independent fiscal councils. All these enforcement mechanisms, however, have their own shortcomings.

First, the (constitutional) courts may not have either the willingness or the competence to evaluate the structural or cyclical balances and intervene in fiscal policy-making (for a theoretical discussion on the role of courts in fiscal policy, see Raudla 2010a). Furthermore, even if the constitutional courts are willing to pass decisions on the violations from the fiscal rule, the legislature may simply choose to ignore those judgments.

Second, the experience with financial markets as enforcers of fiscal discipline is not too promising either: they can often be either too "slow" or too "neurotic" or both, first too slow to react and then overreact. In other words, the financial markets do penalize fiscal profligacy, but they do it in a rather discontinuous fashion and only with significant time lags and often only at extreme stage (Debrun et al. 2009).

Third, the use of independent fiscal councils as an institutional device for helping to enforce fiscal rules (see Calmfors and Wren-Lewis 2011; Debrun et al. 2009; Wyplosz 2005) appears to be the most attractive option, at least theoretically. How well the fiscal council can act as an enforcer of fiscal rules depends, of course, on what exactly their mandate is, how their independence from the political system is guaranteed, what resources they have for conducting independent analyses, etc. Besides monitoring the government's compliance with the fiscal rule(s), the Fiscal Council could also contribute to economic policy discussions in the public sphere and raise the level of public debate on macroeconomic issues. If well designed, the Council can serve as an "interface" between the general public and the government.

In some discussions over fiscal councils, it has been proposed that independent fiscal authorities or fiscal agencies could even *replace* fiscal rules (Debrun et al. 2009; Wyplosz 2005). Such proposals draw on the experience with delegating monetary policy-making to independent Central Banks and argue that, in a similar fashion, fiscal policy-making could be handed over to independent (and unelected) fiscal authorities who would be better able (than elected politicians) to strike

a balance between long-term fiscal sustainability and short-term flexibility.

In the case of supranational fiscal rules (like is the case in the European Union), the national governments may face sanctions for violating the established fiscal rules, which, at least in principle, should enhance their compliance with the rules. As the experience with the Stability and Growth Pact shows, however, the supranational body, if controlled by member states themselves, may be unwilling to actually impose the sanctions (and often with a good reason). To what extent the Fiscal Compact (enacted in 2013) which tries to make the enforcement of the prescribed rules more credible – by involving the European Commission and the European Court of Justice – will fare better remains to be seen (e.g., Bird and Mandilaras 2013).

In the end, however, the effectiveness of fiscal rules depends on political leaders: the rules will work if politicians want them to work and will not work if the political commitment is lacking. If politicians don't want to comply with the fiscal rules, they will usually find a way to evade them, either explicitly or implicitly by engaging in creative accounting and off-budget operations. As Schick (2003) has noted, in countries where fiscal rules are most needed, they may be least workable and where conditions are most hospitable to fiscal constraints, they may be the least needed.

Budget Process Rules

Procedural budgetary institutions (or budget process rules) – which can be contrasted with the output or target-oriented fiscal rules – and their influence on budgetary outcomes have received increasing attention in the political economy literature since the beginning of 1990s. Procedural budgetary institutions are a set of rules that guide the decision-making process in formulating, approving, and implementing the budget. Using Ostrom's (1986) terminology, these budgetary institutions entail position, authority, aggregation, information, and payoff rules that guide and constrain the behavior and decisions of political actors in the action arena of budgeting. In other words, budget process rules can be seen as the "rules of the game" that shape the interaction of the participants involved in budget-making process by distributing strategic influence among them and regulating the flow of information.

How Can Budget Process Rules Influence Budgetary Decision-Making?

Like the case with fiscal rules, it is argued that budget process rules help to alleviate common-pool problems of budgeting. As mentioned above, common-pool problems of budgeting arise from the fact that constituencies who benefit from a particular program have to bear only a fraction of the costs involved in providing this program. Given the divergence between the perceived costs and benefits involved in targeted spending, the elected officials (representing geographically or socially defined constituencies) either in the legislature or executive have incentives to demand excessive levels of expenditures on targeted programs.

As the literature on fiscal governance argues, however, properly designed budget processes can lead the participants in the budget process to internalize the costs of spending decisions and the budget deficit. In discussions over different kinds of fiscal governance arrangements (or budget process rules), a *centralized* budget process is often contrasted with a *fragmented* budget process (Alesina and Perotti 1996, 1999; Fabrizio and Mody 2006; von Hagen 2002). A fragmented process is seen as more likely to give rise to excessive spending and deficits, while a centralized process is considered to be conducive to fiscal discipline.

As von Hagen (2002) emphasizes, the institutional elements of centralization can be relevant at all different stages of the budget process: the planning and drafting of the budget by the executive, the adoption of the budget by the parliament, and the implementation of the budget.

The executive phase can be characterized as centralized, when it promotes the setting of spending and deficit (or surplus) targets at the outset; conversely, it can be designated as fragmented, when the resulting budget is merely a sum of uncoordinated bids from individual ministries.

At the legislative approval stage, the process can be described as fragmented when the following elements are present: the parliament can make unlimited amendments to the draft budget submitted by the executive, spending decisions can be made by legislative committees with narrow and dispersed authorities, and there is little guidance of the parliamentary process either by the executive or by the speaker. Elements of centralization at the adoption stage give the executive or the budget committee an important role in setting the agenda of budget proceedings in the legislature, limit legislative amendments to the budget, require amendments to be offsetting, postulate the legislature to vote on the total budget size before the approbation of single provisions, and raise the political stakes of rejecting the executive's budget (e.g., by making this equivalent to a vote of no confidence).

At the implementation stage, elements of centralization assure that the adopted budget would actually be the basis for the spending decisions of the executive. Thus, implementation can be regarded as centralized when it is difficult to change the existing budget document or to adopt supplementary budgets during the fiscal year, when transfers of funds between chapters are forbidden or limited, and when unused funds cannot be carried over to the next year's budget. Further elements of centralization in the implementation stage include extensive powers of the finance minister to monitor and control spending flows during the fiscal year (e.g., by blocking expenditures and imposing cash limits on spending ministers) and sanctioning the disbursement of funds by a central unit in the ministry of finance (von Hagen 2002; Hallerberg et al. 2007).

Different Modes of Fiscal Governance

Hallerberg and von Hagen (1999) distinguish between two modes of fiscal governance that help to resolve the common-pool problems of budgeting by inducing decision-makers to internalize the budgeting externalities: the *delegation* approach and the *fiscal contracts* (also called the *commitment*) approach.

The *delegation* approach involves lending significant strategic powers to the finance minister, who can be assumed to take a more comprehensive view of the budget than other actors and who would have incentives to internalize the costs of public spending programs (see also Alesina and Perotti 1999). In the delegation approach, the preparation phase of the budget procedure is characterized by strong agenda-setting powers of the finance minister vis-à-vis the spending ministers: the finance minister makes binding proposals for broad budgetary categories, negotiates directly with the individual ministries, approves the bids submitted to the final cabinet meeting, and can act as a veto player over budgetary issues in the cabinet. In the legislative approval phase of the process, the delegation approach limits the rights of the legislature to amend the budget (in order to avoid major changes in the executive's budget proposal) and gives the executive strong agenda-setting powers vis-à-vis the legislature. In the implementation phase, the minister of finance has strong monitoring powers regarding the actual use of budget appropriations by the spending ministers and the authority to prevent and correct any deviations from the budget plan (Alesina and Perotti 1996, 1999; von Hagen 2002, 2008; von Hagen and Harden 1995; Hallerberg et al. 2009).

Under the *fiscal contracts* approach, at the beginning of the annual budget cycle, all members of government negotiate multilaterally and commit themselves to a key set of budgetary parameters or fiscal targets (usually spending targets for each ministry) that are considered to be binding for the rest of the budget cycle. It is assumed that the process of collective negotiations would lead the different actors involved to understand and take into account the externalities entailed in budgetary decisions. During the rest of the budget preparation process, the minister of finance has the responsibility to evaluate the consistency of the budget proposals submitted by the spending ministers with the agreed targets. At the legislative stage, the fiscal contracts approach puts less emphasis on constraining legislative budgetary amendments and more emphasis on the legislature's role in monitoring the compliance of the executive's budget with the fiscal targets, by giving the legislature significant rights to demand budgetary information from the executive. In the

implementation phase, the minister of finance would have strong monitoring and control rights to prevent and correct deviations from the adopted budget; while the delegation approach emphasizes the need for managerial discretion by the minister of finance, allowing him to react flexibly to changing budgetary circumstances, the contracts approach is characterized by contingent rules for dealing with unforeseen events (von Hagen 2002, 2007, 2008; von Hagen and Harden 1995; Hallerberg and von Hagen 1999; Hallerberg et al. 2009).

These two ideal types of fiscal governance are usually contrasted with the *fiefdom* approach to budgeting (Hallerberg 2004), which is characterized by fragmented, uncoordinated, and ad hoc decision-making in all phases of the budgetary process. Under the fiefdom approach, budgetary decision-making is expected to be plagued by common-pool problems, leading to lower levels of fiscal discipline than the delegation or contracts approach. In addition, Hallerberg (2004) has pointed to a *mixed* type of fiscal governance, which employs elements of delegation in the preparation phase but is followed by a contract-like adoption phase, with the parliament playing an equally strong role in the passage of the budget alongside the executive.

Which Form of Fiscal Governance Is Most Effective?

Which of the fiscal governance mechanisms is more effective in solving the common-pool problems of budgeting? Hallerberg and von Hagen (1999) conjecture that the delegation approach is likely to be more successful in safeguarding fiscal discipline because enforcement and punishment mechanisms are more credible under the delegation approach. They argue that under the delegation approach, the defecting minister can be punished by dismissal – which is a harsh punishment for an individual but does not bring about severe consequences for the government as a whole. Under the contracts approach, however, the defecting minister cannot usually be dismissed so easily, since the distribution of portfolios is decided in the coalition agreement; thus, ousting a minister from another party could be regarded as an interference with the internal issues of the other parties in the coalition. Hallerberg and von Hagen (1999) note that the main sanction under the contracts approach – when a minister deviates from the agreed budget targets – is the breakup of the coalition. That, however, would be a harsh punishment for the government as a whole. Further, this "punishment" would only be credible if there are other parties in the parliament with whom alternative coalitions could be formed by the party who seeks to penalize the coalition partner (s) for reneging on the agreement. Thus, given that the parties do not always have incentives to monitor and punish each other, it is more difficult to uphold successfully the negotiated targets than it is to maintain a strong finance minister.

In the more recent discussion on fiscal governance, it is argued that in the case where the government is subjected to supranational fiscal rules, having a commitment (or contracts) type of fiscal governance can facilitate the adherence to fiscal rules (Hallerberg 2004; von Hagen 2008). As Hallerberg (2004, p. 194) explains, the domestic fiscal targets and external fiscal rules can be mutually reinforcing: the external fiscal rule can enhance the commitment of coalition partners to fiscal targets, and the institutions that contract states use for monitoring the adherence to the fiscal contract by coalition partners foster compliance with the externally imposed fiscal targets.

Concluding Remarks

The experiences with the recent fiscal crises indicate that a lot of theoretical and empirical work still remains to be done in order to better understand how budgetary institutions actually influence fiscal policy-making and budgetary outcomes.

In addition, there are many issues that have not been sufficiently addressed by studies on budgetary institutions so far. For example, the existing studies on budgetary institutions have not paid enough attention to the question of which institutional aspects would be conducive to maintaining fiscal discipline and which aspects would be conducive to undertaking fiscal adjustments in the

face of fiscal shocks. Also, it would be worth investigating how fiscal shocks or other developments in the fiscal environment bring about changes in budgetary institutions. Finally, when examining the impacts of budgetary institutions, the resulting spending mix – e.g., in terms of particularistic (pork-barrel) expenditures vs. broader public programs (e.g., social insurance) – should also be considered, in addition to the effects on fiscal discipline.

In further analyses of budgetary institutions, systematic use of Law and Economics approaches could be particularly useful, both for developing the understanding about the impacts of budgetary institutions on the functioning of the economy as a whole and also on the microlevel behaviors of the budget actors.

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