

EVOLUTION OF COOPERATIVE BANKING SECTOR IN POLAND AND FINANCING LOCAL DEVELOPMENT

Andrzej Soloma

Department of Finance and Banking
Faculty of Economics
University of Warmia and Mazury in Olsztyn
e-mail: soloma@uwm.edu.pl

Key words: cooperative banks, local socio-economic development, bank loans.

Abstract

The aim of the study presented in this paper was to assess the operations of cooperative banks in Poland in terms of financing local economic development. The assumption was that the fundamental operation which has an effect on economic growth consists in granting loans to local communities. According to the results of research, in the last 3 years the most significant increase in the banks' receivables from non-financial sector was recorded among natural persons. Yet cooperative banks are still primarily interested in financing business (roughly 75% of the receivables from non-financial sector in 2016 were business loans). Nonetheless, over the last several years the profits of cooperative banks have been decreasing thereby limiting their ability to increase equity through accumulation of profit.

EWOLUCJA SEKTORA BANKÓW SPÓŁDZIELCZYCH W POLSCE A FINANSOWANIE ROZWOJU LOKALNEGO

Andrzej Soloma

Katedra Finansów i Bankowości
Wydział Nauk Ekonomicznych
Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: banki spółdzielcze, rozwój ekonomiczno-gospodarczy, kredyty bankowe.

Abstract

Celem badań przedstawionych w opracowaniu była ocena działalności banków spółdzielczych w Polsce w zakresie finansowania lokalnego rozwoju gospodarczego. Przyjęto, że podstawową działalnością banków spółdzielczych wpływającą na rozwój gospodarczy jest udzielanie kredytów dla społeczności lokalnych. Wyniki badań wskazują, że należności banków spółdzielczych od sektora

niefinansowego w ostatnich trzech latach najsilniej rosł od osób fizycznych. BS wciąż jednak są zainteresowane przede wszystkim finansowaniem działalności gospodarczej (kredyty na ten cel stanowiły ok. 75% należności od sektora niefinansowego w 2016 r.). Zyskowność banków spółdzielczych jednak od kilku lat stopniowo się obniża, co ogranicza możliwości zwiększenia funduszy własnych przez akumulację zysku.

Introduction

The situation on financial markets during the recent financial crisis in the years 2007–2013 showed the scale of influence financial institutions have on the development of real economy and economic growth. The cooperative banking sector in Poland consists of a large network of banking outlets situated in rural areas or in small towns. Cooperative banks act as intermediaries in transfer of direct payments from the European Union to farmers and – through granting loans – they contribute to the modernization and advancement of farming, they activate and support multi-functional development of rural areas and improvement of technical, manufacturing and social infrastructure in those areas. The aim of the study presented in this paper was to assess the operations of cooperative banks in Poland in terms of financing local economic development. The assumption was that the fundamental operation which has an effect on economic growth consists in granting loans to local communities. The analysis of the operations of cooperative banks in Poland was based on information provided by National Bank of Poland (NBP) and Polish Financial Supervision Authority (KNF). The paper also covers an analysis of the risks and dilemmas of this banking sector in the context of capital requirements laid down in new EU regulations.

Banks as institutional factors of local development

One of the trends in new institutional economics is the theory of transaction costs which centres on the search for such economic structures which allow for minimisation of expenditure associated with transactions. The advocates of the new institutional economics define transaction cost as the cost of execution and performance of a contract which does not have to be formal as there are also implicit (informal) contracts. Douglass North (recipient of Nobel prize in economic sciences in 1993) notes that in economy there are sectors which have a typically transactional character such as: wholesale and retail trade, financial intermediation, public administration and security, national defence (NORTH 2004). In analysing transaction costs, other representative of institutional economics, Oliver Williamson (Nobel prize winner in 2009) proposes that they should be divided into *ex ante* (costs of collecting information, finding customers, negotiations) and *ex post* costs which are associated with the performance

of a contract (WILLIAMSON 1979). From the viewpoint of the contract selection, decision-making processes consists of formulating assumptions, determination of parameters/criteria, risks, potential benefits, both short-term and long-term e.g. loyalty (BLASKOVA et al.2015).

As also suggested by HARDT (2005) the higher the *ex ante* transaction cost (paid), the lower the risk of potential *ex post* cost in the future. Furthermore, WILKIN (2016) compares transaction cost to friction resistance in mechanics and stresses that transaction cost arises from limitations of information and people's tendency to engage in opportunistic behaviour. He concludes that although transaction cost and friction resistance are both inevitable, the primary function of economic institutions is to attempt to limit it.

Institutional factors of local and regional development include formal institutions as well as informal institutions. As GODŁÓW-LEGIEDŹ (2010) explains informal institutions should be viewed as rules of conduct included in moral systems, traditions and customs, the observation of which is based on self-control and informal social control. Formal institutions, seen as legal systems that regulate political and economic relations, are essential as they play a coordinative (they reduce the uncertainty associated with interpersonal relationships) and cognitive role. An important element of the concept of formal institutions is ownership and contract law.

In literature on territorial aspects of socio-economic development there are studies that analyse the impact of local conditions on the reduction in transaction cost. Recent results from SOKOŁOWICZ (2015) indicate that at a local and regional level informal institutions generate lower transaction costs than formal institutions.

This paper focuses on the operations of cooperative banks in a territorial context assuming that geographic proximity to potential stakeholders favours minimisation of transaction costs. Still, geographic proximity in itself is not sufficient to boost territorial development. Cooperation and relationships based on partnership and trust are essential. Socio-economic development is a long-lasting process. One of the stimulants of the process is financial support from financial institutions. For cooperative banks an important aspect is to define the purpose of their operations: an economic and a social one, e.g. a cooperative nature and location within a region.

Literature on the subject abounds in examples of correlations between the development of a banking system and economic development of various states. As noted by BIJLSMA and DUBOVİK (2014), effective financial intermediation helps improve capital allocation and drives GDP growth by increasing total factor productivity. However, research findings by CECHETTI and KHARROUBI (2012) suggest that when bank loans provided to the private sector are above 100% of GDP, there are no positive correlation between financial system and economic growth.

Specificity of cooperative banks

As proposed by CZTERNASTY (2015, p. 346), the cooperative movement is a socio-economic trend based on values such as integrity, openness, social responsibility, group solidarity and it is a form of business. Literature on cooperative banks frequently points to their dual nature, the combination of social objectives with economic objectives. ALIŃSKA (2008) notes that on one hand these institutions are owned by local stakeholders for the benefit of whom such institutions should operate, on the other hand, the institutions must seek strategies for improvement of their efficiency and effectiveness so as to be able to compete with other banks and non-bank financial institutions (e.g. savings and credit unions). In terms of the specificity of cooperative banks, one should take into consideration the concept of institutional logics under the organizational theory, which states that institutions operate on multiple embedded analytical levels: social, organizational and individual (FRIEDLAND, ALFORD 1991). According to ŁAWRYNOWICZ (2013) institutional logics are socially constructed models of material and symbolic practices, assumptions, values and beliefs which make individuals create and reproduce their existence, organize their time and space. The assumption of institutional logics is that the process of development and change of institutions can be modelled by agents of change. At the level of sectoral institutional logics the key factor is a common ground understood as a common set of knowledge, beliefs that enable communication and coordination of joint action (THORNTON 2002). For instance, banking logic can be construed as institutional logic within a sector where a bank's personnel constitutes resource designed for generating profit (Tab. 1).

Table 1

Selected institutional logics within the cooperative banking sector in Poland

Category	Banking Logic	Regulatory Logic	Cooperative Logic
Aims	increase in profits, efficiency, market share	construction of a secure system through establishment of ground rules	development and education of local communities through access to financial products and – indirectly – to capital
Management Rules	maximisation of profits and fulfilment of fiduciary duties to shareholders and depositaries	minimisation of individual risk of an entity aimed at minimisation of system risk	search for a balance between maximisation of local communities' access to banking services and fulfilment of fiduciary duties to shareholders and depositaries
Indicators	ROA, ROE, C/I	security and risk	lending commitment, number of shareholders, interest margin
Personnel	manageable resource for generating profit	resource that generates operational risk in a bank	employee, a member of local community, who should meet the financial needs of other community members

Source: own elaboration based on ŁAWRYNOWICZ (2013).

Cooperative banks in the Polish banking system

The tradition of cooperative banks in Poland goes over 150 years back. After the end of World War II, the Banking Law Act of 1975 obligated credit cooperatives to use the name “cooperative bank”. Bank Gospodarki Żywnościowej (Bank of Food Economy) was turned into the head of all cooperative banks. The transformation of Polish economy after 1989 called for changes in the cooperative banking system. At the initial stage of political transformation in Poland, in 1989–1993, the law allowed for uninhibited formation of private banks and the existing cooperative banks could still offer a wide range of banking services throughout the country. Sadly, without having staff experienced in risk management, great numbers of cooperative banks ran into financial trouble. In addition, as a result of expanding into new areas throughout Poland, the banks lost their principal asset, which was the familiarity with clients. At the end of 1993, 680 cooperative banks were in the course of recovery proceedings. In the following years, with active support from NBP, the banks were subjects of consolidation in the form of mergers and acquisitions, recovery programmes and liquidation (SZAMBELAŃCZYK 2006). In consequence, the clients’ trust in the banking sector was compromised. Until 1997 financial losses made 127 banks go bankrupt

Table 2

The Polish banking sector structure in the years 2012–2016

The number of banks					
Year	2012	2013	2014	2015	2016
Commercial banking sector					
Commercial banks	68	67	64	65	63
Cooperative banking sector					
Associations of cooperative banks	2	2	2	2	2
Cooperative banks	572	571	565	561	558
Total (1+2+3)	642	640	631	626	621
Shares of the assets of the entire banking sector					
	2012	2013	2014	2015	2016
Commercial banking sector [%]					
Commercial banks	91.4	91.1	91.1	91.2	90.7
Cooperative banking sector [%]					
Cooperative banks and associations of cooperative banks	8.6	8.9	8.9	8.8	9.3
Shares of the assets of the entire banking sector [%]					
Banks under domestic control	36.4	36.8	38.5	41	43.4
Banks under foreign control	63.6	63.2	61.5	59	56.6

Source: own elaboration based on the data of Polish Financial Supervision Authority (KNF 2017, 2016, 2015) and National Bank of Poland (NBP 2016, 2017).

and led to 243 mergers and acquisitions of cooperative banks (MLECZKO 2008, p. 633). In consequence, the number of cooperative banks decreased from 1664 at the end of 1990 to 560 at the end of 2016 (the number of commercial banks decreased to 63).

The cooperative banking sector has a roughly 9% share in the assets of the banking sector (Tab. 2). In 2016 cooperative banking outlets (head offices included) accounted for 38.0% of the overall number of banking outlets in Poland, and gave employment to 19.7% of the people employed in the banking sector (KNF 2017). In small towns in Poland cooperative banks are often the only banking outlets available. Therefore, the role of this type of banking is far greater than suggested by the cooperative banking sector's share in the assets of the Polish banking system.

At the end of 2016 foreign investors in banks in Poland had an approximately 57% share in the Polish banking sector (Tab. 2). It should be noted that during the last financial and economic crisis cooperative banks, made up in 100% of Polish capital, did not transfer profits abroad and did not grant any foreign currency loans, which means that they did not suffer the negative consequences as much as commercial banks.

Capital adequacy and selected indicators of the condition of cooperative banks

The increased number of regulations in the banking sector observed in recent years is a response of state institutions responsible for the stability of banking systems to the global financial crisis of 2008–2009. The Basel Committee on Banking Supervision (BCBS) tries to establish such security rules for banking systems which will achieve the designed purpose and will be widely applied and used throughout the world. Otherwise, if banks in various regions receive different treatment, they may accumulate risks. The banks in Poland are obliged to meet the capital requirements laid down in EU regulations (package CDRIV/ CRR)¹ and follow the guidelines of NBP and the Financial Supervision Authority on capital adequacy ratios. The CRD IV Directive and CRR regulation have a direct impact on cooperative banks, especially in terms of capital and liquidity requirements. One example could be the solution associated with required amount of equity of cooperative banks. The minimum amount of registered capital for associated cooperative banks equals EUR 1 million. Non-associated banks or banks that intend to operate independently are required to hold a registered capital of at least EUR 5 million. Banks having a registered capital of more than EUR 5 million can operate independently and offer a full range of banking services throughout the whole country. If a bank has a registered capital of less

¹ CRD – Capital Requirements Directive, CRR – Capital Requirements Regulation.

than EUR 5 million, it will have a limited capacity to operate independently and will have to hand over some of the managerial functions to the associating bank. In accordance with CRDIV/CRR, the minimum level of the Total Capital Ratio (TCR)² effective since 2015, is – 8%. In Poland, KNF expects banks to maintain TCR ratio at 12%, higher than the regulatory standards. At the end of 2016, one commercial bank and 28 cooperative banks failed to fulfil KNF's guidelines regarding minimum capital ratios. Their total share in the assets of the banking sector was only 1.9% (*Raport o sytuacji banków* 2017). In 2016 TCR for the entire cooperative banking sector, regional banks included, was 17.1% as against 15.9% in December 2015 (KNF 2017).

The majority of cooperative banking groups in Western Europe are organized as Institutional Protection Schemes (IPS). The essence of IPS is to guarantee the solvency and liquidity of all members.

The IPS, introduced in Poland (in 2015) on the basis of associations of cooperative banks, aims to guarantee solvency and liquidity to all members, increase efficiency of internal control, e.g. in the area of risk management. A group which meets the IPS's eligibility criteria is entitled to present common liquidity ratios, count deposits of cooperative banks at associating banks towards liquid assets, apply 0% credit risk rate to mutual exposures. At the end of 2016 476 cooperative banks were members of the IPS (278 were banks associated with BPS³, 198 were associated with SGB), and 82 were not covered by the institution protection system.

Not all regulations affect banks in equal measure. For instance, the bank tax introduced in Poland in February 2016 did not encumber cooperative banks due to its structure. The tax set at 0.0366% is charged monthly on the sum of assets reduced by, e.g. PLN 4 billion, the value of equity and purchased treasury bonds. In the first half of 2016, the total amount of tax paid by 18 commercial banks was PLN 1.47 billion. All cooperative banks had assets whose value was lower than PLN 4 billion and were exempt from the tax (NBP 2016).

In 2016 the situation in the cooperative banking sector was stable. The net financial result increased against that of 2015 by 22.7% (to PLN 567.7 million). 12 banks reported a net loss of PLN 89.4 million in total. The C/I ratio (cost/income ratio), referred to as cost efficiency ratio, is measured through comparison of bank's operating costs and depreciation with income (loss) from banking operation. The lower the ratio, the greater the cost efficiency. Table 3 shows that the C/I ratio for cooperative banks was higher than that of commercial banks. The ratio is affected by the great number of cooperative banking outlets (head offices included) which account for 38.8% of the overall number of banking outlets in Poland. Cooperative banks often have branches in small towns to ensure that elderly clients who do not use the Internet are not denied access to financial

² TCR – The ratio of a bank's total capital to risk weighted assets.

³ BPS – Bank of Polish Cooperatives SA, SGB – the Cooperative Banking Group SA.

services. The costs at cooperative banks are also affected by the availability of government sponsored preferential loans and aid programmes.

The profitability of cooperative banks in the period between 2012 and 2016 decreased (Tab. 3).

Table 3

Selected indicators of the effectiveness of Polish banking sector in the years 2012–2016

Year	2012	2013	2014	2015	2016
ROA (net income/average assets), in %					
Commercial banking sector	1.2	1.1	1.1	0.8	0.9
Cooperative banking sector	1.2	0.9	0.8	0.4	0.5
ROE (net income/average funds), in %					
Commercial banking sector	11.1	7.8	10.1	7.6	7.7
Cooperative banking sector	11.1	8.4	7.5	4.4	5.2
C/I (costs / income), in %					
Commercial banking sector	49.1	51.0	48.7	56.8	54.3
Cooperative banking sector	65.8	70.9	69.3	76.5	70.4

Source: own elaboration based on the data of Polish Financial Supervision Authority (KNF 2017, 2016, 2015).

Compared to commercial banks, ROA and ROE ratios of cooperative banks were lower. The relatively low profitability of cooperative banks is especially important in light of the fact that in this sector retained earnings are the principal source of equity. In analysing the efficiency ratios within the cooperative banking sector one should note that the banks place deposit surplus in associating banks and invest in debt instruments. In the face of low interest rates in 2014–2016, such operations were less profitable than in the previous years and reflected directly on the results of cooperative banks.

Cooperative banks' lending activity

The dynamics of lending activity of cooperative banks is affected by their profitability, ability to accumulate capital essential for a new lending and the changing regulations of law regarding, e.g. capital requirements and liquidity standards. Local cooperative banks usually provide financing to farmers and small and medium enterprises (Tab. 4). In 2016 business loans accounted for roughly 75% of receivables from the non-financial sector. The breakdown of borrowers is affected by the local character of cooperative banks. If clients are members of local communities, bank employees in charge of loan decisions are more familiar with them and can effectively monitor their financial situation.

The most significant increase in the banks' receivables from non-financial sector was recorded among individual customers (natural persons). In this group of borrowers 56.7% accounted for housing loans (KNF 2017).

Nonetheless, the quality of receivables of cooperative banks from enterprises has decreased (Tab. 4).

Table 4

Loans granted to non-financial sector and loan portfolio quality of cooperative banks (in %)

Specification	2014	2015	2016
Loans granted to			
Large companies	0.5	0.6	0.6
Small and medium-sized enterprises (SMEs)	27.4	27.6	27.4
Individual entrepreneurs	15.0	14.6	14.3
Individuals	19.8	20.7	22.2
Individual farmers	26.9	26.2	25.5
Non-commercial institutions	0.8	0.8	0.9
Local government	9.7	9.4	9.3
Share of non-performing loans, including			
Large companies	12.0	7.2	6.9
Small and medium-sized enterprises (SMEs)	10.7	12.0	24.8
Individual entrepreneurs	9.3	9.5	10.5
Individuals	4.7	4.1	3.7
Individual farmers	1.8	1.7	2.1
Non-commercial institutions	1.4	1.6	2.4
Local government	0.0	0.0	0.1

Source: own elaboration based on the data of Polish Financial Supervision Authority (KNF 2017, 2016, 2015).

In 2016, non-performing loans granted to SMEs accounted for 24.8% of the value of the entire credit portfolio. In this context, it should be stated that in Polish cooperative banking sector the increase in the value of bank's assets is accompanied by increased share of its receivables from enterprises and reduced share of receivables from farmers, which is a result of the location of banks worth over PLN 500 million in large agglomerations (KOZŁOWSKI 2016). A significant problem, especially for small cooperative banks, is the concentration of operations within one county and voivodeship, which makes diversification of credit portfolio risk difficult. In terms of timely repayments, in spite of the changing economic conditions in the farm sector, farmers remain the most scrupulous borrowers. One explanation for this phenomenon could be the fact that in case of default farmers risk the loss of their property, which for most of them is the only source of income.

The analysis of the role of cooperative banks should cover their ancillary and commercial function. The former one involves access to financing of needs of individual clients (natural persons) and enterprises (especially investments), security of deposits and honest consulting. The commercial function manifests as maximization of profits of a bank and interests of stakeholders. For instance, in 2010 commercial banks in Poland recorded one of the highest rates of return in Europe, with nearly half of the profits allocated for dividend (JAWORSKI 2011). During the recent financial crisis cooperative banks did not limit financing to small and medium enterprises, which essentially meant that the condition of their credit portfolio was deteriorated (Tab. 4). Despite the financial crisis the cooperative sector continued to fulfil its economic and social function. It was essential for the development of rural areas and local communities.

Conclusions

In spite of consolidations, mergers, acquisitions and bankruptcies witnessed by the Polish banking system, cooperative banks still constitute the largest group of banks in Poland. According to the results of research, in the last 3 years the most significant increase in the banks' receivables from non-financial sector was recorded among individual customers (natural persons). Yet cooperative banks are still primarily interested in financing local business (roughly 75% of the receivables from non-financial sector in 2016 were business loans). Nonetheless, over the last several years the profits of cooperative banks have been decreasing thereby limiting their ability to increase equity through accumulation of profit. The capital of cooperative banks is generated locally, through accumulation of profit, organic development, and there is no external source of capital which could be blocked during a crisis, with profits transferred outside of Poland in the form of dividend, as it happened in case of some commercial banks controlled by foreign investors.

Translated by Justin Nnorom
Proofreading by Justin Nnorom

Accepted for print 12.04.2018

References

- ALIŃSKA A. 2008. *Aktualne wyzwania rynkowe wobec sektora banków spółdzielczych w krajach Unii Europejskiej*. In: *Współczesne finanse. Stan i perspektywy rozwoju bankowości*. Ed. L. Dziawgo. Wyd. UMK, Toruń.
- BLASKOWA M., BIZIK M., JANKA R. 2015. *Model of Decision Making in Motivating Employees and Managers*. *Inżynierine Ekonomika-Engineering Economics*, 26(5): 517–529.
- BIJLSMA M., DUBOVİK A. 2014. *Banks, Financial Markets and Growth in Developed Countries. A survey of the empirical literature*. CPB Discussion Paper, No. 266.

- CECHETTI S., KHARROUBI E. 2012. *Reassessing the impact of finance on growth*. BIS Working Papers, 381.
- CZTERNASTY W. 2015. *Ustrojowe determinanty spółdzielczości*. In: *Modele ustroju społeczno-gospodarczego. Kontrowersje i dylematy*. Ed. E. Mączyńska. PTE, Warszawa.
- KOZŁOWSKI Ł. 2016. *Banki spółdzielcze a deponenci. Empiryczna analiza oddziaływań dyscyplinujących*. Wyd. Poltext, Warszawa.
- FRIEDLAND R., ALFORD R. 1991. *Bringing Society Back In: Symbols, Practices and Institutional Contradictions*. In: *The new Institutionalism in Organizational Analysis*. Eds. W.W. Powell, P.J. DiMaggio. University of Chicago Press, Chicago.
- GODŁÓW-LEGIEDŹ J. 2010. *Współczesna ekonomia. Ku nowemu paradygmatowi?*. Wyd. C.H. Back Warszawa.
- Informacja o sytuacji banków spółdzielczych i zrzeszających w 2016 r.* 2017. Urząd Komisji Nadzoru Finansowego, Warszawa.
- Informacja o sytuacji banków spółdzielczych i zrzeszających w 2015 r.* 2016. Urząd Komisji Nadzoru Finansowego, Warszawa.
- Informacja o sytuacji banków spółdzielczych i zrzeszających w 2014 r.* 2015. Urząd Komisji Nadzoru Finansowego, Warszawa.
- HARDT Ł. 2005. *Instytucje a koszty transakcyjne w nowej ekonomii instytucjonalnej*. Gospodarka Narodowa, 1–2: 1–19.
- ŁAWRYNOWICZ M. 2013. *Tożsamość organizacyjna banków spółdzielczych w Polsce. Ujęcie instytucjonalne*. Wyd. Poltext, Warszawa
- JAWORSKI W.J. 2011. *Rzeczywista rola banków komercyjnych (kilka wątpliwości)*. In: *Finanse – nowe wyzwania teorii i praktyki. Bankowość*. Ed. A. Gospodarowicz. Wyd. UE we Wrocławiu, Wrocław.
- MLECZKO U. 2008. *Podstawowe przyczyny fuzji i przejęć w bankach spółdzielczych w latach 1994–2007*. In: *Współczesne finanse. Stan i perspektywy rozwoju bankowości*. Ed. L. Dziawgo. Wyd. UMK, Toruń.
- Rozwój systemu finansowego w Polsce w 2015 r.* 2016. NBP, Warszawa.
- Raport o sytuacji banków w 2016*. 2017. Urząd Komisji Nadzoru Finansowego, Warszawa.
- Raport o stabilności systemu finansowego 2016*. 2016. NBP, Warszawa.
- NORTH D.C. 1994. *Economics performance through time*. American Economic Review, 84(3): 359–367.
- THORTON P.H. 2002. *The rise of the Corporation in a Craft Industry: Conflict and Conformity in Institutional Logic*. The Academy of Management Journal, 45(1):81–101.
- SOKOŁOWICZ M.E. 2015. *Rozwój terytorialny w świetle dorobku ekonomii instytucjonalnej. Przestrzeń-bliiskość-instytucje*. Wyd. Uniwersytetu Łódzkiego, Łódź.
- SZAMBELAŃCZYK J. 2006. *Banki spółdzielcze w Polsce w procesach zmian systemowych*. Wyd. AE w Poznaniu, Poznań.
- WILKIN J. 2016. *Instytucjonalne i kulturowe podstawy gospodarowania. Humanistyczna perspektywa ekonomii*. Wydawnictwo Naukowe Scholar, Warszawa.
- WILLIAMSON O. 1979. *Transaction-cost economics. The governance of contractual relations*. Journal of Law and Economics, 22(2): 233–261.

