

# BLUNDER IN A TREND INTERPRETATION: THE FUTURE OF SMALL BANKS IN CROATIA

## ZAMKA U TUMAČENJU TRENDA: BUDUĆNOST MALIH BANAKA U HRVATSKOJ

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**Abstract:** *Despite of the overall presence of highly concentrated banking industry, it would be superficial and inaccurate to conclude that small banks are counting down their last days. Although they participate in only 8 % of the banking sector's assets in the Republic of Croatia, they are an inevitable part of regional development and financial support for small and medium-sized enterprises and other financially excluded clients. This research provides descriptive empirical analysis of small banks' position, their relative importance and future development overview in Croatia with recommendation on more active institutional support in building up their capacities in order to enhance market competition.*

**Key words:** *small banks, banking system, Croatia, concentration, SWOT analysis.*

**Sažetak:** *Usprkos sveopćoj prisutnosti visoko koncentrirane bankovne industrije, bilo bi površno i netočno zaključiti da male banke odbrojavaju svoje zadnje dane. Iako sudjeluju sa samo 8 % u ukupnoj aktivi bankarskog sektora Republike Hrvatske, neizbježan su dio regionalnog razvoja i financijska potpora malim i srednjim poduzećima te ostalim podređenim korisnicima financijskih usluga. Ovo istraživanje pruža deskriptivnu empirijsku analizu položaja malih banaka, njihovog relativnog značaja i pregled budućeg razvoja u Republici Hrvatskoj s preporukom aktivnije institucionalne potpore u izgrađivanju njihove kapacitiranosti kako bi se ojačala tržišna konkurencija.*

**Ključne riječi:** *male banke, bankovni sustav, Hrvatska, koncentracija, SWOT analiza.*



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### 1. Introduction

Small banks suffer from market failure in technology, learning transfer, and finance in comparison with medium-sized and large banks almost everywhere, and are often indirectly discriminated through various regulatory requirements from supervisory institutions. However, small banks are numerous in every banking industry, have a high survival percentage and in some areas like the EU and the USA in the latest financial crisis period turned out to be more tenacious and fighting than large banks if net operating margin, return on equity and return on assets are taken into consideration. Discussion on a firm size importance for its performance is a rather old one with non-financial firms continuously being a dominant case study example in theory of industrial structure. In 1970 a contestable market theory suggested that the impact of firms depends on competitive conditions rather than on market share considerations. Further to this, the banking industry is a specific one because of its activities, regulation, innovations, and the overall economic importance. Banking sector's performance, safety and soundness is a consequence, and among many others, a cause of real economy's development. Taking into consideration the theoretical background of firm size and market structure, and having all specificities of banking industry in mind, research objectives of this paper are: small banks positioning in highly concentrated banking sector of Croatia, examining their risks in SWOT analysis' terminology as well as proposing an adequate institutional support in order to enhance the competitiveness of this market segment.

## **2. Banking firm's size and performance nexus: theoretical background**

Theoretical background on a firm size as determinant of its performance consists of few explanatory views. Perfect competition theory and contestable market theory seem to be the fundamentals on this issue and are quite general. Therefore, structure-conduct-performance hypothesis, efficient structure hypothesis and quiet-life hypothesis present a set of more detailed explanations on size-performance nexus. Perfect competition theory that was promoted by neoclassical economists is based on several assumptions: "market openness, perfect substitution of goods traded in the market, market transparency, atomization of supply and demand, independence of market participants and finally absence of transactional costs or the level of costs than can be tolerated" [1]. One that is often critical to accomplish is the dispersion of supply and demand. According to this theory, if firm size is sufficient enough to determinate or substantially influence the price as a market maker, then deviations from perfect competition on a market are present. Finally, the economic welfare of consumers is being reduced because product quality in relation to its price is suboptimal. On the other hand, contestable market theory suggests that rather than the number of suppliers, entry and exit costs are relevant for firms' behavior and resource mobilization. If entry and exit is costless, there is a constant threat to product providers that already exist on the market from potential new entrants that will increase market contestability by undercutting prices and improving the quality of products. Therefore, something that would be characterized as a monopoly or oligopoly in a perfect market theory, following contestable market hypothesis does

not necessarily lead to sub-optimal resource allocation or extra profits of companies with significant market share. “Incumbents’ behavior is disciplined by the existence of aggressive firms ever ready to enter at the slightest sign of profitability or inefficiency” [2]. Briefly, the market consists of existing and potential participants. Structure-conduct-performance (SCP) hypothesis is derived from a perfect competition theory. This hypothesis holds that “market structure determines competitive conduct and hence profits” such as that “high bank concentration leads to less competition and hence to higher profits” [3]. An alternative view, efficiency-structure hypothesis suggests that the market structure is shiftable in a time lag. Gradually, under pressure from more efficient banks that by reducing product prices increase their market share, less efficient banking services’ providers are pushed from the market. This view is partly consistent with the contestable market theory. “Efficiency thus is not an effect but a determinant of market structure” [3].

However, banking market is certainly not perfect nor is it a contestable in its entirety “due to various obstacles that slow down competitive rivalry” [4]. If financial markets were perfect then financial intermediaries would not exist at all. Likewise, traditional theory of financial intermediation suggests that market imperfections like informational asymmetry and transactional costs are the *raison d’être* of the financial intermediaries. On the other hand, the contestability of the banking market is significantly decreased due to high entrance and exit costs and barriers, as well as substantial sunk costs. In addition, price differentials between the banks might not lead to significant clients’ movement between the banks because of cross-selling appearance, relationship lending, brand loyalty and existing reputation, and interest rate insensitivity of small-sized deponents. However, Llyewellyn reported that banking markets have become more contestable in the last few decades in certain business segments due to several reasons, i.e. deregulation in the financial services sector, the development of information technology, and of credit-scoring techniques, securitization, outsourcing or contract banking, banking products deconstruction, the development of Internet facilities as channels of distribution for banking products and decreased importance of branch network, unbundling of bank products, tendency of less conservative consumers to choose firms that offer formerly typical banking services [5].

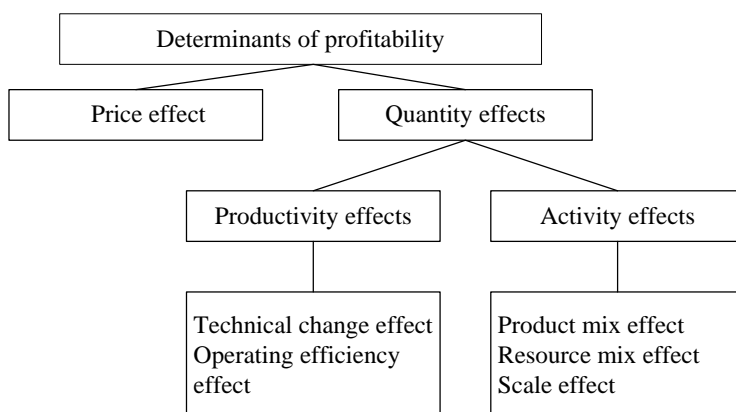


Figure 1: Determinants of profitability modification.

There are still quite significant differences in activities and products, financing, risk management techniques, adopted technology and financial success among various dimensions of banks. Therefore, a question on what drives a performance of a bank becomes an inevitable one. Figure 1 presents a systematical answer on this issue that was arranged by Grifell-Tatjé and Lovell [6].

Briefly, as shown, banks may achieve various types of efficiency (as well as inefficiency) such as cost and/or profit efficiency. Cost efficiency might be a consequence of economies of scale, economies of scope and the so-called managerial or x-efficiency while profit efficiency depends on the appropriate price policy and the presence or absence of a market-maker position in a certain business segment. Profit efficiency existence is a side-effect of SCP's market conditions. Cost efficiency depends on productivity and activity level. Both of these concepts, cost (in)efficiency and profit (in)efficiency can simultaneously exist in a single bank. One of such examples is promoted by the so-called quite-life hypothesis that argues that "banks with higher market share and reduced competition have more expense-preference behavior that is being compensated with higher profit efficiency in comparison with other dimensions of banks" [7]. Differently, Harker and Zenios classified drivers of performance into several classes: "strategy, execution of strategy and the environment" [8]. Strategic choices can be made in product mix, client mix, geographical location and distribution channels. Strategy execution depends on the existence of X-efficiency, human resource management, use of technology, process design and interdependence of all these factors. Finally, environmental factors such as technology, consumer tastes and regulation are causes and consequences of changes in the banking industry. Therefore, a SWOT analysis proves to be a suitable technique of qualitative confronting of all possible internal and external sources of cost and profit efficiency.

### **3. Too big to be unsuccessful? Or less is more?**

#### **Impetus to banking industry consolidation and prosperity of small banks**

Empirical researches on determinants of bank profitability are united in the presumption of bank size as being a statistically significant variable of bank financial success. Possible explanations are mostly related to positive effects of economies of scale.

Economies of scale are often promoted as the most important comparative advantage of larger banks and vice versa. However, a question on the optimal banks size in a dynamic perspective remains open and challenging and needs to be empirically examined and verified. "The size-profitability relationship may be expected to be non-linear" [9]. However, it seems that it is becoming a less explanatory variable of firm's success because "economies of scale can be brought from specialist providers of processing services through sub-contracting", and it turns out that "size is not itself a sustainable competitive advantage" [5]. In addition, the European Commission reported "that as banking systems approach a higher level of sophistication in terms of technology and productivity, opportunities from exploiting economies of scale might be quite limited" [9].

Besides economies of scale Llywellyn points out other arguments for recent consolidation trends in the banking industry worldwide [5]. New technology is one of them. Its development and implementation depends on bank size as well as the ability to achieve its costs reduction through very large scale of operations. Competition intensification and thus profitability erosion as well as capital market pressures, rising diversification opportunities, efficiency gains and cost-cutting are substantially important reasons for mergers and acquisitions in the banking sector. Larger banks can also develop internally or apply more efficient risk management techniques as well as put into effect various diversification effects. Larger banks are also under the implicit protection of lender of last resort through too-big-to-fail principle and may enjoy reputational externalities resulting from their size. Moreover, larger banks have a higher degree of market control and reduced probability for being the target of a hostile takeover. However, for some banks consolidation may be induced by simply following the overall trend on a market or herd behavior. Nevertheless, new regulatory proposals in the aftermath of recent financial crisis will probably change some of until now undisputable comparative advantages of large banks. "Supervision and regulation must be substantially more oriented toward containing systemic risk and addressing the associated problems posed by institutions considered too-big-to-fail" [10]. Recent developments also highlighted the importance of the continuing role of small banks in USA. This argument substantiates the facts that financial crisis did not originate in small banks and that their traditional role of financing households, small business and agricultural firms is widely supported by Federal Reserve System (FED) that ensures policy recommendations and guidelines for appropriate capital planning, credit administration, liquidity management policies and specificities of management information system in small banks. By distributing various guidelines and examiners' assistance, FED alleviates relevant practices and the learning process of small banks' staff. On the other hand, research background on small banks positioning in the era of conglomerated financial-services industry is rather scarce and superficial and has only recently been actualized by financial crisis and side-effects of consolidation of financial services industry. Bongini et al. conducted a research on small banks in highly concentrated Italian banking sector and abstracted that "small banks remarked higher loan and deposit growth in comparison to large banks" from 1998-2004 [11]. A significant growth of deposit and loan market share of small banks at the expense of large banks while simultaneously maintaining high profitability standards and chosen credit risk profile is the result of localized and relationship lending. Besides relationship lending phenomenon and small business lending that are permanent focus of these examinations, other numerous advantages of small banks are omitted from this and similar researches. Similarly, Basset and Brady reported that from 1985 to 2001 small banks' assets in the USA also grew more rapidly than large banks' one, while achieving sustainable profits despite banking sector's consolidation and its increased competition [12]. However, growth of balance sheet data may induce incorrect conclusions due to statistical illusion of growth rate which is almost always higher in small banks because of lower comparison base. In such a manner, Tarullo reports that since 1989

the shares of deposits, banking assets, and small business loans held by community banks have declined substantially [10]. Finally, Hannan and Prager provide empirical evidence in which manner a large, nationally present bank might influence the profitability of a small, locally present bank in the USA from 1996-2003 [13]. In rural banking markets, a large banks' entrance causes statistically significant reduction in the profitability of small banks because of the former's more effective competing for fee income and higher loan quality in comparison to small banks. Moreover, large banks usually have comparative advantage of wholesale funds' access and tend to lower deposit interest rates as they do not depend on deposits. Therefore, large banks usually have lower funding costs which implies lower loan interest rates as well.

#### **4. Small banks' performance in the Republic of Croatia**

According to the methodology of Croatian National Bank (CNB), banks whose total assets participate with less than 1 % in total assets of the overall banking sector are considered to be small banks. In 2009, 23 banks out of 32 banks were small-sized and their contribution to total assets of the banking industry was approximately 8 % or HRK 31 billion in the overall banking intermediation. In the same period, only 6 small banks were foreign-owned and 1 bank was state-owned. Other relevant performance figures for the 2003-2009 period are given in table 1. From 2003-2009 the average size of small banks was constantly increasing and since 2006 the average size of small bank has been above HRK 1 billion. The average market share of small banks was during this period almost constant with approximately 0.35 % in total assets. A significant slow-down of assets' growth of small banks followed in the second year of application of the obligatory CNB's bills and in the aftermath of financial crisis. For this reason, there was a substantial profit reduction to the lowest level since 2003. In comparison with large banks, small banks remarked higher average capital adequacy ratio of nearly 17 % in 2009, and higher assets' growth from 2005. From 2003-2008, consolidation of banking industry in Croatia reduced the number of small banks. Therefore, only 18 small banks with legal entity continuity were selected for performance analysis (table 2). During the observed period, small banks reported lower average return on equity than large banks. This may be explained with lower financial leverage usage at small banks in comparison to large banks. Furthermore, equity financing and return on equity turned out to be in reverse proportion for large banks. On the other hand, small banks had proportional equity financing ratio and return on equity. The latter was a consequence of profit reduction caused by an increase of financing costs and higher administrative and regulatory costs. The average return on total assets had been constantly decreasing for small banks, and had been unstable for large banks. However, in 2008 average return on assets of small banks recorded negative value. For the 2003-2008 period, operative margins decreased from 6.59 to 3.80 for small banks, which indicated the reduction of the basic banks' activities, while in large banks it remained on almost the same level. Net interest margin also decreased as a result of higher deposit interest

rate. In addition, small banks could not compete in non-interest income and related services in comparison with large banks.

	Year	Total Assets	Market Share	Assets Growth	Profit (Loss) Before Tax	Capital Adequacy Ratio	Number of banks
Total for Small Banks (< 1 % of market share)	2009	31,037,598	8.05	3.48	90,821	17.29	23
	2008	29,992,547	7.95	6.68	171,841	17.92	23
	2007	28,114,351	8.15	18.76	323,864	19.17	23
	2006	23,672,942	7.76	17.57	328,093	19.07	23
	2005	20,135,365	7.74	4.16	252,785	23.30	24
	2004	19,330,538	8.43	-3.87	207,475	30.38	27
	2003	20,109,080	9.85	N.A.	225,174	28.93	29
Average for Small Banks (< 1 % of market share)	2009	1,349,461	0.35	6.00	3,949	17.29	23
	2008	1,304,024	0.35	6.20	7,471	17.92	23
	2007	1,222,363	0.35	21.70	14,081	19.17	23
	2006	1,029,258	0.34	24.62	14,265	19.07	23
	2005	838,974	0.32	16.19	10,533	23.30	24
	2004	715,946	0.31	13.75	7,684	30.38	27
	2003	693,417	0.34	13.03	7,765	28.93	29
Total for Large Banks (> 5 % of market share)	2009	313,401,731	81.27	6.64	4,500,026	15.46	6
	2008	293,889,910	77.94	7.82	5,190,046	14.32	6
	2007	272,580,567	79.01	11.48	4,335,478	14.54	6
	2006	244,514,863	80.20	14.77	3,563,164	12.84	6
	2005	213,051,093	81.85	13.71	3,434,230	13.59	6
	2004	187,366,959	81.71	18.27	3,204,194	14.07	6
	2003	158,426,372	77.62	N.A.	2,399,888	14.85	6
Average for Large Banks (> 5 % of market share)	2009	52,233,622	13.55	9.66	750,004	15.46	6
	2008	48,981,652	12.99	6.85	865,008	14.32	6
	2007	45,430,095	13.17	10.97	722,580	14.54	6
	2006	40,752,477	13.37	15.46	593,861	12.84	6
	2005	35,508,515	13.64	13.99	572,372	13.59	6
	2004	31,227,827	13.62	20.47	534,032	14.07	6
	2003	26,404,395	12.94	49.99	399,981	14.85	6

Table 1: Comparison of key performance figures of small and large banks from 2003-2009, expressed in thousands HRK and percentage (CNB, Performance Ratios).

	Year	Equity Financing	ROA	ROE	Operative margin	Net Interest Margin	Non-Interest Income Ratio
Large Banks	2008	13.45	1.66	11.06	3.94	2.74	1.78
	2007	12.24	1.55	11.60	3.71	2.54	1.74
	2006	9.91	1.44	12.77	3.63	2.65	1.70
	2005	8.16	1.63	17.08	3.85	2.80	1.76
	2004	7.41	1.66	18.26	4.02	2.90	1.91
	2003	7.26	1.47	15.77	4.43	3.58	1.98
Small Banks	2008	13.98	-0.04	-1.78	3.80	3.77	1.06
	2007	13.90	1.11	5.01	5.05	3.93	2.27
	2006	14.35	1.38	7.06	5.43	4.31	2.39
	2005	14.72	1.36	8.55	5.58	4.50	2.60
	2004	15.58	1.55	8.84	6.12	4.85	2.89
	2003	17.19	1.54	8.15	6.59	5.36	3.01

Table 2: Equity financing, profit allocation, and income structure ratios for selected small banks and all large banks, average ratios from 2003-2008 in percentage (Privredni vjesnik, 2003-2008).

## 5. Small banks in Croatia: SWOT analysis perspective

A descriptive, SWOT analysis of the internal and external determinants of small banks' success in Croatia is provided in the following table.

STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> <li>1. Stable funding resources that arise from substantial level of core deposits;</li> <li>2. Higher equity financing which contributes to better liquidity risk management and bank's soundness;</li> <li>3. Personal approach to big deponents reduces unexpected deposits' withdrawal;</li> <li>4. Do not suffer from sudden stops in capital flows from international financial market;</li> <li>5. Profit retaining and its reinvestment builds up bank's capital;</li> <li>6. Better understanding of the regional market;</li> <li>7. Possessing soft, client-related information;</li> <li>8. Relationship lending reduces credit risk of an individual loan;</li> <li>9. Reduced possibility of being involved in high risk activities like subprime loan origination;</li> <li>10. More prudent behavior because they are not too-big-to-fail;</li> <li>11. Contribute to systemic risk decrease;</li> <li>12. Quick and efficient service providing;</li> <li>13. Do not suffer from diseconomies of scale;</li> <li>14. Simple organization structure;</li> <li>15. Board of directors and top management are located in the local community.</li> </ol>	<ol style="list-style-type: none"> <li>1. Funding disadvantages caused by the absence of wholesale funding;</li> <li>2. Necessity of rejection of big deponents due to possible liquidity problems caused by an unpredictable deposit withdrawal;</li> <li>3. Higher costs of attracting savings because of lower lender of last resort impact on deponents' perception of bank's importance, safety and soundness;</li> <li>4. Financial scale disadvantages in debt and equity issuance;</li> <li>5. Reduced asset-liability management effects because of limited access to financial market;</li> <li>6. Lower tax shield usage due to lower profitability;</li> <li>7. Higher equity financing reduces return on equity;</li> <li>8. Lower growth potential;</li> <li>9. Limited credit capacity;</li> <li>10. Prudential restrictions on activities and growth;</li> <li>11. Modest and limited risk management practices that are sophisticated and costly;</li> <li>12. Reduced geographical and sectoral diversification of credit portfolio;</li> <li>13. Larger and faster exposure to a single client that may result with client being rejected and assets' shrinking;</li> <li>14. Difficulty of compliance with regulation standards;</li> <li>15. Substantial costs of bank's branches and workforce; modest geographical coverage with branches and ATMs;</li> <li>16. Lower budgets; high costs of advertising and promotion;</li> <li>17. Substantial costs of IT;</li> <li>18. Missing reputation;</li> <li>19. Large banks are market makers and small banks are price takers;</li> <li>20. Lack of sophisticated and highly-educated human resources;</li> <li>21. Market failure in training practices.</li> </ol>
OPPORTUNITIES	THREATS
<ol style="list-style-type: none"> <li>1. SMEs financing and financing informational opaque clients i.e. financially excluded clients;</li> <li>2. Local focus that may contribute to the regional development and future increase of savings funds if economic growth is remarked;</li> <li>3. Personal approach to target clients may lead to cross-selling;</li> <li>4. Developing core credit-deposit business that is resistant to financial crises;</li> <li>5. Avoiding products that highly depend on economies of scale;</li> <li>6. Strategic alliances and cross relations with other small banks in order to reduce participation in substantial costs of IT and ATM network;</li> <li>7. Mergers with other small banks in order to avoid some discriminatory and restrictive regulation and improve its safety net possibilities;</li> <li>8. E-learning of employees in order to reduce training costs and failure of knowledge transfer;</li> <li>9. Prudential authority's orientation on reducing systemic risk and deconglomeration of financial-services industry.</li> <li>10. Small banks are more attractive for acquisition in countries that limit the number of bank establishment licenses.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduced ability to react on external shocks;</li> <li>2. Prudential regulation that indirectly favors large banks;</li> <li>3. More complex prudential regulation requires more complex risk measurement and management, expensive IT infrastructure, and human resources employment (in order to reduce operational risks);</li> <li>4. Losing track with competition in financial engineering area and adoption of financial innovations;</li> <li>5. Customers' preference for one-stop shopping;</li> <li>6. Aversion towards new shareholders limits their capital increase;</li> <li>7. Failure of strategic alliances due to preference of the existing ownership structure;</li> <li>8. Higher turnover of sophisticated workforce because of the inability to be promoted and improve knowledge and skills in unchallenging financial services.</li> </ol>

Table 3: SWOT analysis of small banks in Croatia (Author's overview).

## 6. Conclusion

Although trend analysis suggests that small banks are an unimportant part of banking system, their relevance in regional development is multiple with special reference to SME financing. However, the future viability of small banks in Croatia significantly



depends on institutional support to this sector in iniquity market conditions. The absence of sufficient IT and human resources, the lack of experience in advanced risk management techniques, higher funding costs, and limited diversification opportunities are some of the most remarkable disadvantages of small banks in Croatia. In 2009, small banks in Croatia recorded huge losses what may serve as a warning to the national prudential authorities in creation of prerequisites for their survival.

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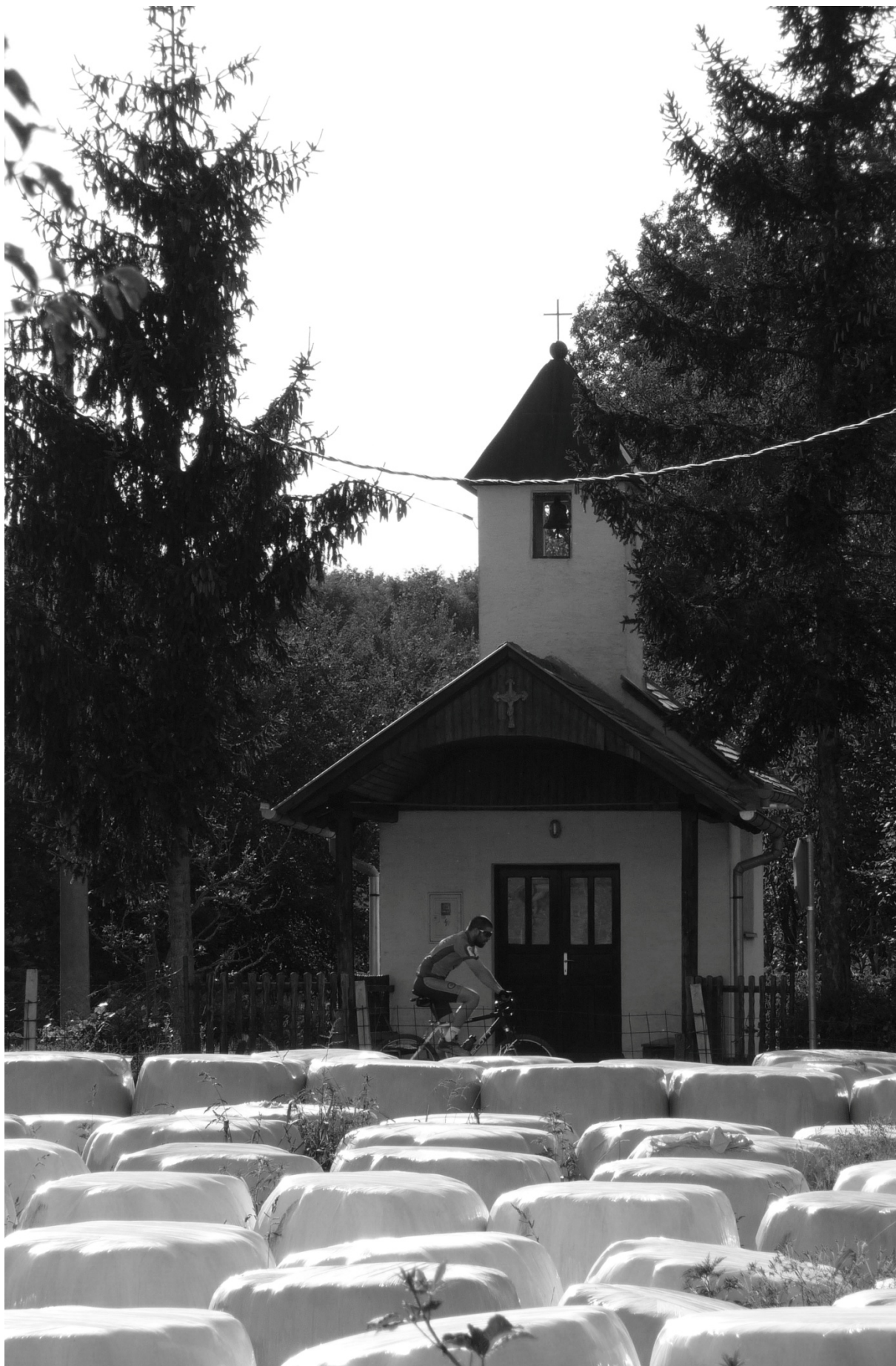


Photo 082. Church in Lipovac / Crkva u Lipovcu