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Role of financial innovations in oligopolistic market environment

Price stability usually prevails in the long run in oligopolistic markets, and the role of price race is replaced by research & development and innovation, advertising, and brand names. The current banking market of Hungary is strongly oligopolistic, with limited price competition in the scope of financial products and services. Various financial innovations, brands, and name brand values – as well as intensive communication thereof by advertisements and other PR tools – are of increasing significance in banks' successful market strategies.

ronment the importance of the role of factors that influence success in the market (price, quality, reliability, brand value, innovation, marketing communication) shifts, adopting to the specifics of the individual market segments. This is the explanation for an unorthodox phenomenon that while the Hungarian banking market is oligopolistic, and in certain cases monopolistic, with strongly homogenous products and services, there is strong competition in certain customer and product segments, and financial innovations play an increasing role in market share expansion.

SPECIAL CHARACTERISTICS OF OLIGOPOLISTIC MARKET STRUCTURES

As one of the most important results of the banking privatisation in Hungary, large foreign banking groups have been active in the Hungarian market as owners since the mid-90s, contributing to the stability of the Hungarian financial system, the expansion of financial intermediary services, and the efficient servicing of economic entities by their capital strength, sophisticated banking products and services, and by developing infrastructure in banking. All this happened in a banking environment whose structural features decidedly reflect an oligopolistic market. In such an envi-

Market structures and competition

Individual market structures prompt market players to respond by adequate approach and conduct.¹ Competitive strategies devised in order to be successful in the market are typically growth-oriented, because stronger market positions mean higher profits, which require stronger capital base, which in turn means that corporate value maximisation results in an increase in size. A *polypolistic* market structure is a competitive environment where a multitude of players are present on both the demand and the supply side, but none of them has such a clout as to being able to

manipulate prices. There is a strong price competition, all market players face the constant threat of losing market positions, the demand is driven by prices and highly volatile. In this market environment all players expect pressures to emerge from cost and demand side alike. In order to design a competitive price structure, every market player has to develop their applied technologies, products, or the sales process itself, which means there is a strong pressure for research and development. Competitive edge secured this way may well be short-lived, because there is a realistic chance that it will be neutralised by similar innovations or even imitations marketed by rivals. Therefore, one of the main motivations for innovation is to ensure *pioneer profit*, but when it cannot be exploited fully, a trailing strategy will become typical.

When the above market structure is interpreted as a competition market with players of roughly identical strength, then a monopolistic market represents the other extreme. This market could also have multiple players on the supply side,² but one of them is in a power position, dictating market conditions and prices and making all the other players adapt. This set-up does not rule out competition among the other market players, but the corporation in the monopoly position is less compelled to implement cost cutting or to carry out research and development, which would ensure lower costs. Also, the corporation is directed away from product innovation by the assumption that profits to be expected of new products will be earned at the expense of the profit on old products. Also, the return on development investments is not guaranteed, thus corporations in monopoly position are unlikely to risk their existing high market shares by these costs. Undoubtedly, in the short term they should not fear the appearance of rivals who'd make their positions vulnerable by copying their products, but fears of newcomers could

keep up their interest in research and development in the longer run.³

The market structure in between the two extremes is called *oligopoly*, where the market is dominated by a relatively few players with powerful capital bases who are too strong to improve their market positions by price competition at the expense of the others. This struggle could go on for too long without any substantial reshuffle in existing positions, not to mention its cost impacts. Since it's a few players, chances are they will regulate the market by informal agreements (cartel) rather than entering a cut-throat race to 'bleed' each other. Obviously, their options are subject to competition regulations in the country, how efficiently competition authorities can act against competition-restricting practices and informal cartel agreements. If price reduction – price competition in other words – is not the path to take to improve market positions in an oligopolistic market environment, then the regulatory role of prices diminish, while the impacts of other factors grow stronger. Similarly to the polypolistic competition market, the need for research and development is also present in this market structure, but at a lower intensity, because no direct relation can be ensured between R&D costs and the profit they generate.⁴

Market structure cannot be separated from the size of the market players, because adjustment to changing market conditions, as well as the compulsion and willingness to carry out research and development activities are changing accordingly. In analysing the connection between absolute company size and innovation activities, J. Schumpeter reached the conclusion that technological renewal results in much greater production and welfare impacts than ever achievable by improving the distribution of assets.⁵ Among his followers, *J. Tabbert* says technological progress depends on large corporates with quasi monopoly power, and innovation efforts can be expected by them mostly⁶,

because they are in a position to take the necessary costs and risks, and funding is also available to them. The intensification of the consolidation processes that create a monopoly position can also be attributed to the fact that technological progress demand an increasing optimum corporate size due to declining yields, thus costs savings ensured by *economies of scale* are basically available to large corporations. Of course, only when they see the research activities and their results through and manage market implementation. In this scope, however, the competitive edge of large corporation is not so unambiguous, because *diseconomies of scale* may emerge as they are less inclined to implement innovation-driven products in the market as soon as they can.⁷

Oligopolistic banking market in Hungary

The credit institutions of the Hungarian financial sector that operate as companies limited by shares are analysed below, using the preliminary data for end-2007.⁸ Said group of institutions comprise 38 credit institutions in the following breakdown: large banks (7), medium-sized banks (11), small banks (15), and specialised credit institutions (5).⁹ The main characteristics of the structure of the banking market have been defined by the aggregate figures of total assets, equity, and after-tax profit as submitted to the PSZÁF [Hungarian Financial Supervisory Authority].

The strongly oligopolistic nature of the Hungarian banking market is underlined by a high level of concentration in the aggregate total assets of the credit institutions in the analysis. Accounting for 18.4 per cent of the entire Hungarian banking sector in terms of quantity, the market share of the seven universal large banks¹⁰ amounted to 72.88 per cent at the end of 2007 while the most populous group – that of

small banks – owned a mere 3.31 per cent of all assets. The combined weight of medium-sized banks and specialised financial institutions – 14.53 per cent and 9.28 per cent, respectively – could not offset the dominance of large banks, either. The picture is further refined by the fact that OTP Bank, the largest player in the Hungarian market, single-handedly accounted for more than one-fifth of the aggregate total assets (See Chart 1). Evident in the Hungarian retail banking market, *'the leader-follower model [...] the ensures high profitability for the market-leader bank [...] while providing a profit for rivals that covers costly expansion.'*¹¹

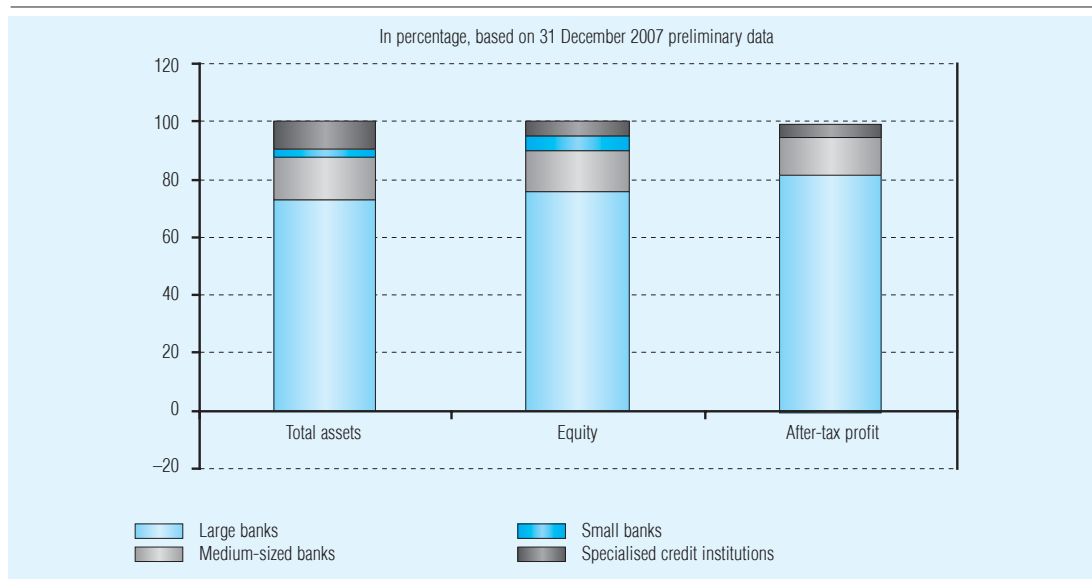
As for equity, a similar image emerges. Large banks hold a 75.58-percent share in aggregate equity, reflecting a little denser concentration than in terms of total assets. Smaller banks had a bigger share (5.20 per cent) at the expense of specialised financial institutions (4.99 per cent), and the weight of medium-sized banks (14.23 per cent) in fact did not change.

According to preliminary data, the 38 credit institutions reported HUF 316.5 billion in after-tax profit. Large banks accounted for 82.76 per cent, medium-sized banks and specialised credit institutions were responsible for 13.40 per cent and 4.67 per cent, respectively. The combined after-tax profit of the fifteen small banks, however, reflected a loss of more than HUF 2.6 billion.

According to the report of the Várhegyi Committee *'an empiric analysis of the Hungarian banking market indicates decidedly weak price competition in certain segments of the retail banking market (overdraft, consumer credits, personal loans, current accounts).'*¹² A limited role of price competition is one of the typical characteristics of an oligopolistic market structure. Limited price competition prevents significant discrepancies not only in the prices of “mass products” (such as account packages) but in the terms of conditions of deposit and loan products that could influence customers' choice of banks.

SHARES OF FINANCIAL INSTITUTION GROUPS

(per cent)



Source: author's own calculations

Banks should implement adequately transparent pricing and comparable contract conditions to allow these minute differences detected, which could at the end of the day provide basis for customers to find the best-suited tailor-made financial solutions. This, however, would require more comprehensive information on the content of banking services, the cost impacts of each service (comparability of interest rates and fees), and rights of obligations of banks and customers.

FINANCIAL INNOVATIONS

In this section the ways financial innovations could replace or supplement price competition, which is relegated to the backseat by the oligopolistic market, are scrutinised. These are financial products and instruments that have widened the horizon for investors thinking in yield/risk terms by making them believe: higher risks do not necessarily come with a proportionate increase in risks, because risks can be

spread in globalise financial markets owing to increasingly complex financial products. Their expansion and increasing popularity were feeding on two sources. One stemmed from the banking system, which expected financial innovation to provide remedy for declining profitability. Investors had a keen interest in new instruments, primarily because of high yields and their seemingly low (underestimated) risks. This latter illusion was further intensified by the fact that inadequately transparent financial institutions devised “rebundled” products – which were innovative but high-gearing designs thus containing exponential inherent risks – creating markets where appropriate control and regulations have yet to be implemented.

Financial innovations – risk correlations

The scope of financial innovations is quite wide, the most general description being a pool of novelty investment and financing instru-

ments that have yet to be made available in lending, equity and financial markets.¹³ In the financial regulations of Germany, financial innovation refers to securities that transform taxed interest income into tax-free capital gains tax.¹⁴ Financial innovations represent new financial instruments, market practices, and sales techniques that promote the acquisition of new customers, the reduction of funding costs, and the chance for additional liquidity by increasing funding. Financial innovation products facilitate speculation-driven income based on high risks inherent in interest and exchange rate volatility and capital gearing, at the same time the spreading of risks, and the avoidance of certain administrative regulations of financial markets. Financial innovations are closely linked to the progress in information and communication technology, which, mainly starting in the 80s, triggered a surge in the size of global financial markets.

Financial innovations include the typical products of *securitisation* (euro securities, variable-rate securities, depository receipts, zero-coupon bonds). *Carry trade* transactions, *derivatives* (*futures, swaps, options*), and innovative financial institutions with extreme dynamism such as *hedge funds* are also included in this scope. The majority of the latter are held by investors that have positions financed by carry trade, and when they close these positions on a mass scale it could trigger chain-reaction-like disruptions even on markets that are geographically far from one another. The possibility of a fast-paced infection on global markets raises a number of issues for monetary authorities in respect of regulation and control, as also mentioned by FED governor *Ben S. Bernanke*,¹⁵ because financial innovations carry considerable risks and spreading them around in global economy while serving general economic objectives such as financial stability, investor protection, and market integration. The current financial regulations,

however, have no efficient regulations to manage the downsides of these designs.

Mentioned among financial innovations, securitisation – used by multinational commercial banks more and more extensively these days – means a design where banks sell assets they've disbursed (mostly mortgages and syndicate euro loans) in the form of bonds in the market, thus banking loans are “rebundled” into securities. For banks it means they get back their loans which they can disburse again. These loans are then delisted from their balance sheets and transferred to a special financial service provider (SPV),¹⁶ which starts marketing securities and bonds using these securitised loans as collateral. This relatively simple opportunity to get rid of risks, however, represents a strong urge for banks to ease their strict loan assessment procedures, because the risks of lending should not be borne by them and no financial responsibility links them with the special purpose vehicle.

Higher risks represented by financial innovation products manifest themselves in the scope of derivative products in such a way that the value of these products are subject to the market prices of one or more underlying products, and a future obligation for buying or selling is attached to them. Any profits or losses made in a derivative deal are subject to the difference between the contractual and the actual price, and – due to unforeseeable price volatility – they come with much higher risks than usually seen in stock markets. The explanation is that investors buy shares in traditional stock markets in hopes of higher yields represented by dividends and higher share price gains. Experience indicates that investors that make long-term stock investments prove successful, because they have time to wait for share prices to climb. However, when an investor invests in financial innovation instead of buying shares, for instance by buying a futures contract for three or six months and expecting the share

price to increase, then the time factor as well as stock market trends shall be taken into consideration. If the expected price increase happens just one day after the futures deal has matured, then the investor has to kiss his money good-bye.

Investors have to live with market risks, and financial innovations can't change that, either. German daily *Die Zeit*¹⁷ brought up the law of conservation of energy in thermodynamics, which postulates that energy does not decrease in a closed environment, as the analogy for the assumption that no financial innovations, no matter how efficient they are, can reduce market risks. All these designs manage is a different spread of risks. In this light, it's no coincidence that experts from the German financial regulator underlined in respect of the U.S. sub-prime mortgage crisis that data released so far were completely contradictory to the thesis that financial innovations by themselves trigger considerable welfare impacts by spreading risks wider.¹⁸ Due to high capital gearing, detecting and managing the actual extent of risks delivers a more complex task for financial risk management than in other, more traditional, business scopes. Sándor Czirják establishes that *'there are huge income and amounts invested in mutual funds that cannot be justified by real economy terms [...] and central banks cannot do much about them'*.¹⁹

INNOVATIVE DESIGNS IN THE HUNGARIAN BANKING MARKET

The demand for applying financial innovation in the Hungarian market has been growing, banks come up with products that carry higher and higher risks in an attempt to compensate for their stagnating or declining ROE and ROA (Return On Equity and Return On Assets, respectively). Financial innovations in the scope of deposits and investments in the

retail market, one of the most important funding sources for banks, are scrutinised below. Neither the corporate nor the municipal market is analysed here. New financial instruments deployed by financial institutions in the retail market in the race for savings cannot always be considered innovations, because most of them are just creatively composed, 'repackaged' instruments. Nevertheless, they reflect well the change in concept as banks are trying to adapt to changing customer demand by devising new products and services.

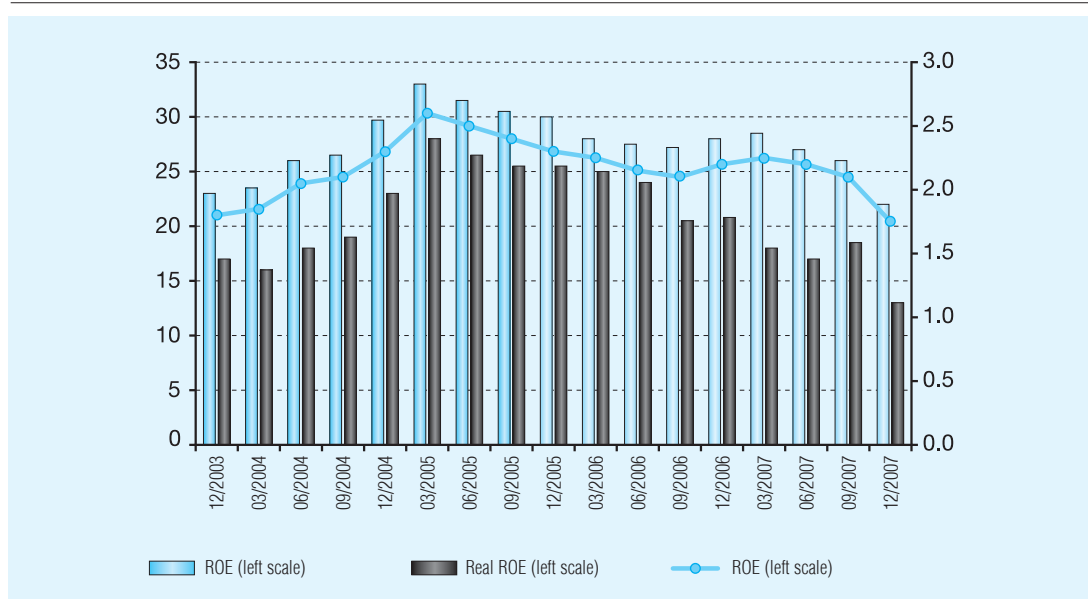
Combinations of fixed deposits and equity market investments

The phenomenon that traditional deposit products offered by banks are losing their yield appeal due to increasing inflation has been apparent lately. In order to improve the real yields of their savings, however, customers have increased their demand for investment opportunities that offer higher yields and reasonable risks. The increase in the in the global risk propensity of investors has prompted Hungarian banks to react fast and offer their customers a wide variety of stock investments, or combine their traditional deposit products with high-yield stock investments. These combines investment portfolios are registered under different names at some of the banks, but their structures in terms of yields and risks are very similar (*See Chart 2*).

Customer savings of higher yield expectations are managed by banks as a portfolio part of which is invested as deposits and the other part is invested in the investment notes of various mutual funds (mostly open-end funds), representing a basket of various yield and risk levels. The proportions at which the portfolio is divided are typically defined by the individual banks. In these designs, the deposit part is completely risk-free as far as capital repayment

Chart 2

PROFITABILITY INDICATORS OF THE HUNGARIAN BANKING SECTOR



Source: MNB Jelentés a pénzügyi stabilitásról [NBH Report on Financial Stability] (April 2008) http://www.mnb.hu/Engine.aspx?page=mnbhu_stabil&ContentID=10897

is concerned, and an outstandingly high fixed rate is due for the first 2 or 3 months, making the yields of this half of the design predictable with high accuracy. Following the maturity of interim period, the deposit part of the portfolio continues to earn a risk-free yield, but now only at the (lower) rate defined by the list of conditions effective at the moment.

The other part of the portfolio is invested in risky stock market instruments, investment notes of open-end funds, and fund of funds designs²⁰ that have stock indices of the most dynamic markets and some commodities indices as underlying products. These designs come with special methods to calculate yield and special payment schemes. Investment fund management companies owned by banks actually channel savings invested in their investment notes back to their banks as deposits, which could be very important for the banks from the aspect of liquidity management.²¹

In order to make them acceptable for customers, banks try to reduce the higher risks of

stock investments by various methods. Applied in a wide scope, capital-guarantee designs²² means the bank guarantees repayment of the invested capital, thus the potential loss to be incurred to the investor in the worst case affects the yield but not the principal. Also aimed at increasing customers' propensity to invest, banks would also pledge guarantee on a minimum yield in a design named yield-guarantee investment.²³ Practically, it means the repayment of the invested principal plus a pre-defined yield following a certain maturity.

Homogenous range of products and services

In the deposit segment of the Hungarian banking market, quite an intensive competition is evident among credit institutions – somewhat deviating from the general situation. While the schemes described above – namely the combination of deposits and stock investments in

some design – can hardly be called classic financial innovations, they are to be regarded as new financial instruments, because they facilitate higher yield demands to be met and risks spread reasonably.

These financial schemes, however, are unable to ensure a permanent competitive edge, because these products of banks sooner or later become homogenous on the back of imitation and their conditions will also be very similar. The success of individual banks in accumulating funds from the market – and thus expand their market share and increase their customer base – is closely related to the size of the nominal interest rate they are offering, because customers intent on savings in deposit designs will basically select banks by their motivation to achieve higher yields. This means product pricing is a top priority in this scope, indicating that there could be some segments in an oligopolistic market environment that act as if they were part of a polypolistic market structure. This in turn means price competition is the decisive factor, demoting the other factors of bank selection (brand value, reliability, quality of service, access etc.). A very intense price competition has evolved in the Hungarian retail banking market, keeping available margins low and thus damaging the profitability of banks. (*See Chart 3*)

The period preceding the implementation of the interest tax in September 2006, when a very aggressive competition developed among banks to win customers, delivered a remarkable experience regarding business policy and communication alike. Although they managed to mobilise billions of forints of savings by marketing deposit designs that offered relief from the interest tax, their margins had decreased due to competition, the net interest margin barely exceeded one or 1.5 per cent. The same phenomenon was evident one year later in the race for securing maturing deposits. The graph reflects well the fact that the banking spread

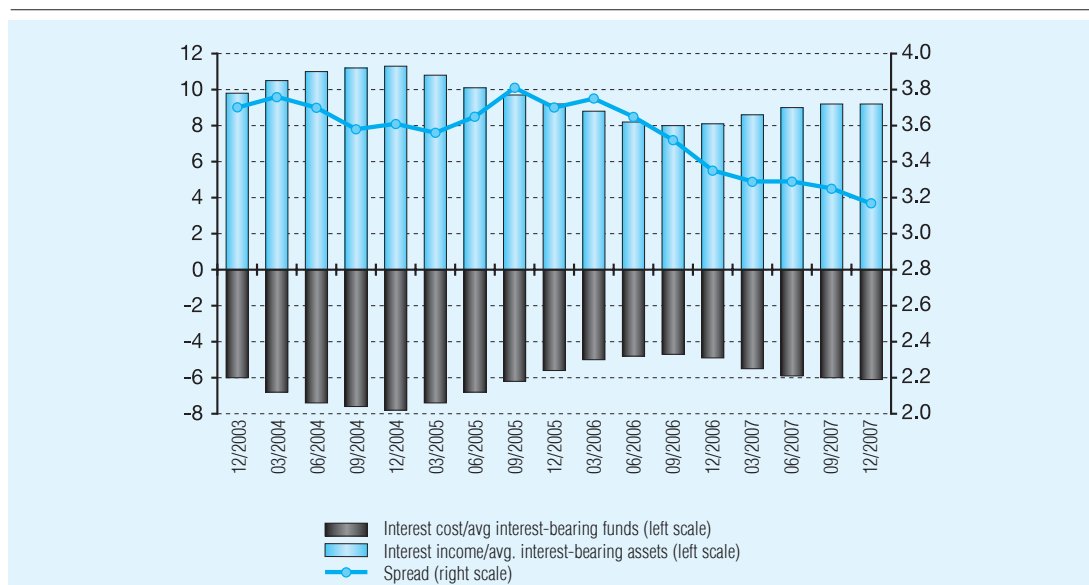
was declining from March 2006 until December 2007 constantly, dropping by more than half a percentage point. This trend continues in the first quarter of this year.

Interestingly, it was not the largest retail bank, OTP, that emerged victorious in the race for the acquisition of customers and funds. In their subsequent external communication, the management of the bank emphasised not the failure of the bank to respond to this one-off retail demand with appropriate speed and flexibility, but the bank's decision of refusing to pay anything for customer acquisition. For so attractive conditions should have been offered by the bank to lure this price-driven and therefore swaying customer scope, which is very hard to hold on to, that the management of OTP rejected after considering profitability aspects.

This story has several interpretations from communications aspects. One, OTP woke up late, had been overtaken by rivals, and could not exploit this opportunity. The other explanation says the bank regarded the retention of its existing customer base as having a higher value than acquiring a price-oriented, barely predictable scope of new deposit holders.

General experience indicates that when a bank's customer policy sets expansion objectives for the purpose of raising funds, it should be supported by the bank's communication, emphasising interest conditions that are better than the rivals'. This product communication will mostly acquire customers for whom price is the only or a top priority aspect. In these cases components of the brand and corporate image have limited use, because they have hardly any impact as their messages barely register in the decision-making process. The measurable success of communication (increase in customer number, raising funds) is subject not to the communication activity itself but to an external factor, the price of the product in question. The consequence is not free of a certain trade-off impact: The increase in funds

BANKING SPREAD AND COMPONENTS



Source: National Bank of Hungary, http://www.mnb.hu/Engine.aspx?page=mnbhu_stabil&ContentID=10897

could happen as a result of a dilution in the customer base by an unstable group of deposit holders.

The objective of establishing a permanent and reliable customer base in a strongly segmented customer policy can be supported successfully by targeted communication that facilitates for the bank to linking of products and services on both the assets and the liabilities side and to employ cross-selling. Here, communication plays not just a monotone tune but employs an orchestra to play specific chords for various target groups. An important lesson, a market player should not shy away from competing aggressively in customer segments that promise high margins.

LEVELS OF INNOVATION

For the sake of successful operation in a competitive environment, innovation has become a factor with increasing significance for economic entities, including those in the financial

scope, banks in particular. In addition to organic growth, and mergers that cause fast-paced increase in size, innovative financial designs, the implementation of new products and services can ensure expansion in the market. According to a study made by IBM Institute for Business Value,²⁴ innovation allows a company to distinguish itself from the competitors, to lift it up from the mass of similar companies. In other words, unorthodox financial innovations help a company adapt to market demands, contribute to an increase in profit, help create and maintain a competitive edge, and facilitate expansion in the market. (See Table 1)

Innovation process requires new ideas, or assumes a radically different way of thinking than the one typical presently. John White, head of IVB's research team, says²⁵ innovation has three main types and application areas. One of them is innovations in *products and services*, a scope already mentioned here. The other comprises *operational* innovation, new solutions to improve the efficiency of the bank main opera-

Table 1

CHANGING NATURE OF INNOVATION

Characteristics of current innovations	→	Characteristics of future innovations
• Emphasis on innovation in products and services	→	• Wide scale, including innovation in business model
• Driven by development and technology	→	• Driven by customer demands and technology
• Pivotal role for Research & Development	→	• Pivotal role for management and individuals, because R&D seen as major innovation carrier
• Uncooperative; an internal affair for the company	→	• Open and cooperative, passes organisational and corporate barriers
• Distinction from others ensured by technology	→	• Distinction from others by integration of technology and business activity

Source: IBM Institute for Business Value, In:Dare to be different: Why banking innovation matters now (2007), IBM Global Business Services, page 4 <http://www-935.ibm.com/services/us/index.wss/ibvstudy/gbs/a1025350?cntxt=a1000043>

tional scopes and core activities. The third is the innovation in business *model*, in the course of which the bank creates a new target, restructures its organisational structure, its scope of activities, and expands its market operations.

Product innovation means the renewal of banking products and services, allowing access to new market segments and customers, at the same time helping retain existing market positions and customers. In terms of differentiation and distinction from competitors, however, product innovation can only deliver temporary successes, because new designs are relatively easy to copy. Having a more permanent impact, the future is dominated by innovations that impact operative processes and the basis of corporate operation model, As shown in *Table 1* above. This presumes a different attitude, because it builds on openness and cooperation rather than the seclusion of product and services innovation, and crosses organisational and institutional barriers. Applied technologies and business integration are the most significant factors of a marked and long-term sustainable differentiation; nevertheless the most popular innovation process focuses on the renewal of the scope of products and services – including imitation – because banks are

driven in this direction by cost impacts and time requirements.

Financial innovations can only be successful when development processes are subordinated to customer demands, and the establishment of the infrastructural background of innovations are managed with priority. This is an environment that facilitates efficient integration of business processes and technologies that serve them, in order to create banking value.

FINANCIAL INNOVATIONS IN THE HUNGARIAN BANKING MARKET

Price competition is demoted in most market segments in the strongly oligopolistic market structure of the Hungarian banking sector. Based on international experience, this circumstance should increase the need for financial innovations, as they play an important role in market expansion and profitability.

According to an NBH analysis,²⁶ the profitability indicators of the Hungarian banking sector are satisfactory in international comparison, but have been deteriorating continuously. ROE indicator has been declining at a larger extent than ROA, but the development of both

indicators suggest that the competitive edge of the Hungarian banking sector has been deteriorating at an accelerating rate especially compared to developed countries, but has become unfavourable in comparison to banking sectors in the CEE region, as well. (See Chart 4). Experts of financial innovations say these factors represent the necessary prerequisites of innovation taking place in the banking sector both in the scope of products and services as well as technological processes and organisational changes. However, the application and expansion of financial innovations cannot be separated from the general standard of financial culture, in other words the acceptance level of the customer segment targeted by these new financial instruments.

Depth indicators reflecting the operation and quality of the Hungarian system of financial intermediaries, however, attest to constant

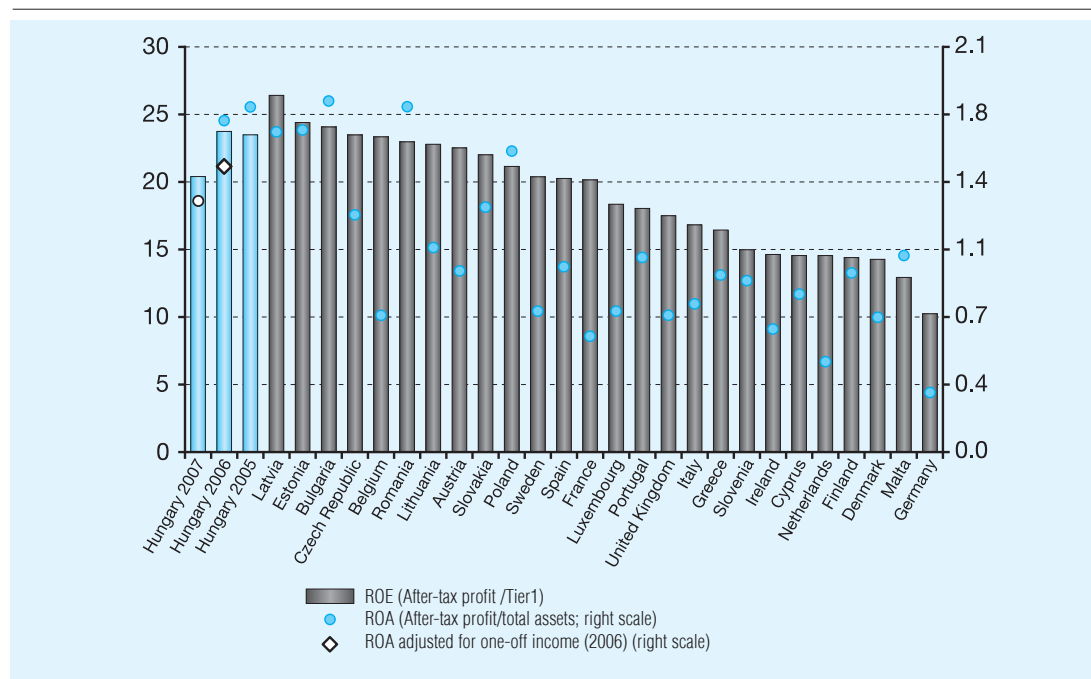
improvement. The combined total assets of the Hungarian banking sector is close to the GDP, and the banking loans of the private sector amount to half the gross domestic product. The financial system has been growing deeper despite the slowdown of economic growth, which indicates that the population attempts, in spite of austerity measures, to maintain the consumption standards they have gotten used to. An upswing in the portfolio of all-purpose mortgages or the appearance of high-risk yen loans are ample proof of that. Although in the event of default the potential losses of lending banks will be lower due to real estate collaterals, the process provides ample indication how much the household sector refuses to acknowledge increasing financial risks.

In order to maximise yields on savings generated on decreasing real wages, a rather wide scope of the population shows willingness to invest in stock investment designs and fixed

Chart 4

ROE AND ROA INDICATORS IN INTERNATIONAL COMPARISON

(2006)



Source: National Bank of Hungary, http://www.mnb.hu/Engine.aspx?page=mnbhu_stabil&ContentID=10897

deposits combined with stock investments, both designs being among high-risk financial innovations. To maintain lending expansion, banks have to increase funding, thus they are keen to meet these demands in their deposit offers, even feeding these demands by increasing marketing costs and using the tools of business communication. The aforementioned report of the Hungarian central bank establishes that *'risk-based competition among banks also intensifies, manifesting itself in the development of increasingly risky products and in the easing of lending conditions.'*²⁷

Considering the fact that the ratio of interest income compared to fee and commission income is outstandingly high and constantly growing in the Hungarian banking sector in international comparison, it is evident that profitability is threatened from two sides. One of the factors is the consequences of the subprime mortgage market crisis – rising interest rates on the back of credit crunch in particular – and the other component is the fight for deposits in the Hungarian market, which increases funding costs. Their combined impact projects a deterioration in the profitability of the entire Hungarian banking sector. (See Chart 5)

As banking products and services become strongly homogenous, banks apparently try to devise their service packages by heeding customer demands. A peculiar example of financial innovation is application consulting, a product scope where competition is fought in offered services rather than prices, by which banks try to acquire micro businesses as well as small and medium enterprises. The service packages marketed by banks offer, in addition to financing, the search for applications, consulting, the preparation of the bid itself, and the complex job of 'after-sales care' for applications. Banks that vie for enterprises applying for EU and Hungarian economic development funds are differentiated by their *'prices, flexibility, collateral requirements, and service standards'*.²⁸

CONCLUSIONS

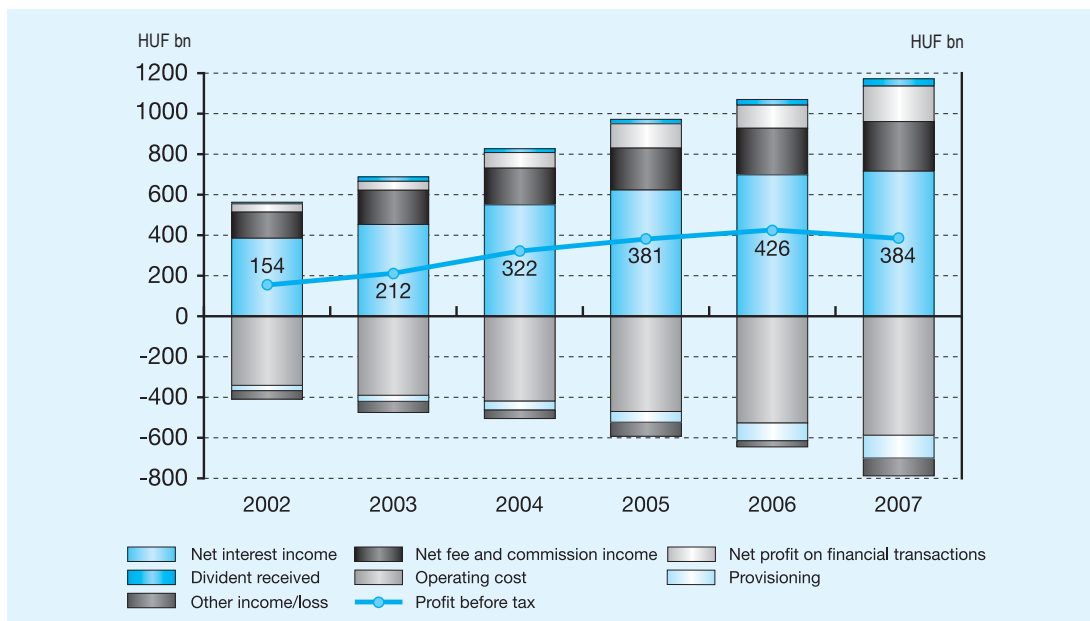
■ Designed in deference to the environment as represented by the market structure, competition strategies use a wide variety of tools to ensure that the targets of expansion, efficiency, and profitability be met. Competitive pricing of products and services has an eminent role, complemented by innovations representing brand new solutions (renewal of products, technical processes, and the business model itself), related Research & Development activities, as well as brand values and, not the least, marketing communication. Price competition is dominant in a polypolistic market structure, but in an oligopolistic market environment it loses significance, becoming less of a tool to achieve competition policy goals. Consequently, other tools and components – especially innovations created by research and development – will see appreciation.

■ Amid wide-spread financial globalisation, market competition intensifies, but not necessarily in the form of price wars alone, manifesting in a fast-paced expansion of financial innovations that manage to meet investors' differentiated demands for yields and risks. On the organisational and institutional side, consolidation processes intensify, to be fed further by mega mergers and acquisitions. At the same time, an explosive progress is evident in the product range, resulted by the implementation of more complex products and service packages, as well as creatively combined savings and loan products. These offer customer less and less transparency; and while price competition is primarily focused on components of publicly announced – well-communicated – conditions, transparency is damaged, and consumer decisions are manipulated by marketing messages and advertisements, and comparison between the products and services of banks becomes increasingly hard.

■ The appearance and fast-paced expansion of financial innovations on global financial mar-

Chart 5

DEVELOPMENT OF PRE-TAX PROFIT AND ITS MAIN COMPONENTS



Forrás: MNB, http://www.mnb.hu/Engine.aspx?page=mnbhu_stabil&ContentID=10897

kets was connected to the large-scale boost in liquidity that had been based on global economic growth, central banks' expansive monetary policies, and growing savings at oil producers on the back of surging oil prices since the early 2000s. Exceeding real economy demands by far, this excess liquidity was tapped by an investment race which increased global risk hunger. Against this backdrop, various financial innovations (securitisation, carry trade) increased the risks of the overall global financial system and established the channels through which local or regional market problems managed to spread extremely quickly, allowing them to become global. International financial regulations could not keep the pace with these fast changes. Due to their private activities, hedge funds are in fact exempt from certain equity market regulations and data reporting obligations, and since they are operated with extremely high capital gearing, they increase and transfer risks exponentially across global financial markets, increasing their vulnerability.

■ The analysis of the structure of the Hungarian banking market verifies a gradual appreciation among market players' competition strategy considerations for new financial designs that are capable of servicing customer demands efficiently in an oligopolistic market environment. The expansion of these financial innovations is influenced by a number of factors both on the supply and the demand side. The constant deepening of the financial system and market expansion potentials lying within has so far meant a relatively low urge for banks to expand the range of financial instruments. On the demand side, a so far subdued interest in more complex financial products in the scope of retail customers,²⁹ however, is in conjunction with the general level of financial literacy. Investors do not have appropriate product information, are unable to understand yield and risk correlations of more complex designs or exchange rate risks. Their financial decisions lack complex deliberation, often reaching them on the basis of a single

factor (yield, monthly instalment, etc.).³⁰ As a consequence of limited financial literacy, some aversion to electronic financial transactions is evident, and mistrust is also reflected in domestic card usage patterns.

■ The oligopolistic structure of the Hungarian banking sector should be regarded as a long-term condition, and it cannot be ruled out that the market consolidation will intensify further, while more balanced power positions are developing in certain segments. The intensifying competition in the banking sector will cause interest margins to decline deeper, therefore, in order to maintain profitability, some credit institutions will have to cut back operational costs and also to increase the ratio of fee and commission income against the dominance

of interest income. For this purpose they have to bolster the sales of higher-yield, more complex banking products and services, implementing new instruments and financial innovations. All this requires that these products be communicated to customers in an increasingly transparent form, not the least because of attempts by the regulatory authority to make banking processes more transparent.

■ In line with international trends, the success of the Hungarian banking sector is vitally decided by the success of finding an innovation environment³¹ where the renewal of the range of products and services is increasingly fuelled by a competitive edge in prices and service quality driven by customer demands and the endeavour to be distinguished from rivals.

NOTES

¹ A general corporate competition environment is assumed when market structure is analysed; the correlations and rules shown here are basically valid in the scope of banking and finances, as well

² A monopolistic market may be evident on the demand side, too; and the specifics described here are applicable in this case, only with a different cast

³ Reuter, F. J. (1970): *Forschungspolitik und Forschungsplanung*, Duncker und Humblot Verlag, Berlin, page 38

⁴ See in detail: Machlup F. (1967): *Oligopol und Freiheit*, *ORDO* Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft, Bd. 18.

⁵ Schumpeter, J. (1980): *A gazdasági fejlődés elmélete: Vizsgálódás a vállalkozói profitról, a tőkéről, a hitelről, a kamatról és a konjunktúraciklusról* [Theory of economic Development: A Study into Corporate Profit, Capital, Loans, Interest, and Economic Cycles], KJK, Budapest, 320 p.

⁶ Tabbert, J. (1974): *Unternehmensgröße, Marktstruktur und technischer Fortschritt*, Göttingen, page 5

⁷ Tabbert, J. (1978): page 15

⁸ http://www.pszaf.hu/engine.aspx?ResourceID=pszafhu_bankinfo_2007_4

⁹ Except for MFB [Hungarian Foreign Trade Bank], EXIM, and KELER Zrt. [Central Clearing House and Depository Co. Ltd.]

¹⁰ OTP Bank, MKB Bank [Hungarian Foreign Trade Bank], K&H Bank, CIB Bank, RAIFFEISEN Bank, ERSTE Bank Hungary, UniCredit Bank Hungary

¹¹ Lakossági Pénzügyi Szolgáltatásokat Vizsgáló Szakértői Bizottság [Expert Committee Scrutinising Retail Financial Services] (2006): *Javaslatok a lakossági bankszolgáltatások problémáinak kezelésére* [Propositions for managing problems detected in retail banking services], Budapest, page 18 – <http://www.meh.hu/tevekenyseg/tevekhirek/20070131.html>

¹² See same, page 5

¹³ <http://www.onpulsion.de/lexikon/finanzinnovationen.htm>

¹⁴ <http://www.flyingfox.de/foflex/index.php/> Finanzinnovation

- ¹⁵ Speech Chairman Ben S. Bernanke To the Federal Reserve Bank of Atlanta's 2007 Financial Markets Conference, 15 May 2007 – <http://www.federalreserve.gov/newsevents/speech/bernanke20070515a.htm>
- ¹⁶ Special Purpose Vehicle
- ¹⁷ <http://www.zeit.de/1988/43/Verruecktes-Spiel-auf-Zeit>
- ¹⁸ Entzauberte Finanzinnovationen – Ernüchterndes Fazit, Handelsblatt, 6 April 2008 – http://www.handelsblatt.com/News/Unternehmen/Banken-Versicherungen/_pv/_p/200039/_t/ft/_b/1413143/default.aspx/entzauberte-finanzinnovationen.html
- ¹⁹ Párhuzamos világaink [Parallel worlds], Piac & Profit [Market & Profit], Years XII., February 2008, page 5: “a huge industry has developed, a huge secondary virtual world where profits have to be generated some ways... The demand for profit and the compulsion to invest have jointly created a multitude of investment funds and investment structures that are completely intransparent for the investor”.
- ²⁰ For instance Pioneer Profitmax Alapok Alapja [Pioneer Profit Max Fund of Funds], Raiffeisen Private Banking Pannonia Alapok Alapja [Raiffeisen Private Banking Pannonia Fund of Funds]
- ²¹ MNB Jelentés a pénzügyi stabilitásról [NBH Report on Financial Stability] (April 2008), page 79 <http://www.mnb.hu/Engine.aspx?page=mnbhustabil&ContentID=10897>
- ²² For instance UniCredit Piaci Optimum Alap [UniCredit Market Optimum Fund], Aegon Ózon Éves Tőkevédett Származtatott Alap [Aegon Ozone Annual Capital-guarantee Derivative Fund], MKB Zöldbolygó Tőkevédett származtatott Alap [Hungarian Foreign Trade Bank Green Planet Capital-guarantee Derivative Fund], Erste Top 10 Kötvény Alap [Erste Top 10 Bond Fund]
- ²³ For instance Befutó Tőke- és Hozamvédett Alap, Világszám Tőke- és Hozamgarantált Származtatott Alap, Erste Garantált Kötvény, Raiffeisen Univerzum Tőke- és Hozamvédett Származtatott Alap
- ²⁴ Dare to be different: Why banking innovation matters now (2007), IBM Global Business Services, <http://www-935.ibm.com/services/us/index.wss/ibvstudy/gbs/a1025350?cntxt=a1000043>
- ²⁵ <http://www-935.ibm.com/services/us/gbs/bus/pdf/ibm-podcast-dare-transcript-final.pdf>, 15 March 2007, pp 1–3
- ²⁶ [NBH Report on Financial Stability] (April 2008), page 67
- ²⁷ See same, page 68
- ²⁸ Ms Farkas, Barbara: Pályázatok: több bank is újított [Application: Banks come up with something new], Világgazdaság [World Economy], 10 April 2008, page 6
- ²⁹ A survey made by market research company GfK Hungária for The Wall Street Journal Europe indicates that the ratio of customers investing in short- and long-term bank deposits is 11 per cent in Hungary, while the corresponding figures in Western Europe, and the Czech Republic are 43 per cent and 27 per cent, respectively. One percent of the Hungarian population invests in stock and the same ratio is registered in stock funds (the comparative figures in Western Europe are 11 per cent and 9 per cent, respectively). In Hungary, life insurance and pension funds have an investment ratio of 10 per and 5 per cent, respectively, while the respective indicators in Western Europe show 25 per cent and 14 per cent. According to the survey, an even three-fourths of the Hungarian households have no savings whatsoever, while the corresponding figure in Western Europe is 40 per cent. – <http://origo.hu/uzletinegyed/befektetes/20071214-feher-hollo-a-magyaroknal-a-penzugyi-befektetes-gfk.html>
- ³⁰ See in detail: Ms. Kotulyák, Éva: A banki szolgáltatásokról [Of banking services], Cégvezetés [Corporate Management], 11 December 2007
- ³¹ Cline, K. (2004): Institutionalizing Innovation, Banking Strategies, September/October 2004, <http://www.bai.org/bankingstrategies/2004-sep-oct/kenworthy/index.asp>

LITERATURE

- CARLTON, D. W. – PERLOFF, J. M. (2003): Modern piacelmélet [Modern Market Theories], *Panem, Budapest*
- EHRlich, E. – FANELLI, D. (2004): The Financial Services Marketing Handbook – Tactics and Techniques That Produce Results, *Bloomberg Press, Princeton*
- FREI, F. X. – HARKER, P. T. – HUNTER, L. W. (1998): Innovation in Retail Banking, *The Wharton School, University of Pennsylvania*
- HULL, J. C. (1999): Opciók, határidős ügyletek és egyéb származtatott termékek [Options, Futures, and Other Derivatives], *Panem – Prentice-Hall, Budapest*
- JORION, P. ((1999): A kockázatosított érték [Value at Risk], *Panem, Budapest*
- KOHN, M. (1998): Bank- és pénzügyek, pénzügyi piacok [Financial and Banking Affairs, Financial Markets], *Osiris, Nemzetközi Bankárképző [International Training Centre For Bankers], Budapest*
- MACHLUP, F. (1967): Oligopol und Freiheit, *ORDO Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft, Bd. 18.*
- REUTER, F. J. (1970): Forschungspolitik und Forschungsplanung, *Duncker und Humblot Verlag, Berlin*
- SCHUMPETER, J. (1980): A gazdasági fejlődés elmélete: Vizsgálódás a vállalkozói profitról, a tőkéről, a hitelről, a kamatról és a konjunktúraciklusról [Theory of economic Development: A Study into Corporate Profit, Capital, Loans, Interest, and Economic Cycles], *Közgazdasági és Jogi Könyvkiadó, Budapest*
- SEITZ, T. (Hrsg.) (1989): Wirtschaftliche Dynamik und technischer Wandel, *Gustav Fischer Verlag, Stuttgart-New York*
- SIKLOS, P. L. (2003): Money, Banking, and Financial Institutions – Canada in the Global Environment, *Fourth Edition, McGraw-Hill Ryerson*
- TABBERT, J. (1974): Unternehmensgrösse, Marktstruktur und technischer Fortschritt, *Göttingen*
- Dare to be different: Why banking innovation matters now (2007), *IBM Global Business Services*, <http://www-935.ibm.com/services/us/index.wss/ibvstudy/gbs/a1025350?cntxt=a1000043>
- Expanding the Innovation Horizon: The Global CEO Study 2006, *IBM Global Business Services*. March 2006, <http://www.ibm.com/bcs/ceostudy>
- MNB Jelentés a pénzügyi stabilitásról [NBH Report on Financial Stability] (April 2008), *Budapest*
- The paradox of Banking 2015 – Achieving more by doing less (2005), *IBM Institute for Business Value* <http://www-935.ibm.com/services/us/index.wss/ibvstudy/imc/a1022912?cntxtId=a1000043>