

# MARKET FOR INVESTMENT BANKING PRODUCTS IN MODERN ECONOMY

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## Abstract

*This article is divided into four sections. In the first one, we describe the origin and history of investment banking, with particular focus on the economic conditions that led to its birth in the United States. The second part considers those products offered by investment banks which are available to Polish entrepreneurs and individual clients willing to introduce their financial resources to the capital market. In the fourth, and last, section of the present article, we look at those areas of investment banking which stand a chance to flourish in the aftermath of the crisis. In this last section, we also touch on matters of international scope, which is necessitated by the fact that specialist (i.e. separate from domestic universal banking) investment banking in Poland is the preserve of foreign investment banks and their Polish branches.*

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## Introduction

The article discusses product solutions used in Polish investment banking. Investment banking is considerably more risky than commercial banking, which caters to retail customers. The article also features a risk scale for individual banking operations (a more comprehensive review in: Michalczyk, 2012 – in press<sup>2</sup>)

Furthermore, we analyse the market positions of various investment banking products including cost-plus pricing, which accounts for risk and lost opportunities.

The idea of investment banking dates back to the period of economic development in the U. S. following the Civil War and is, most importantly, associated with the construction of the American Transcontinental Railroad. What is more, the concept had been inspired by preexisting European banking structures. Nowadays, one may safely assume, all financial and capital operations beyond the scope of deposit and credit (lending) systems of regular commercial banks are controlled by investment banks.

While investment banking is preoccupied with direct acquisition of capital, commercial banking acts as an intermediary between those who have a surplus of money and those in need of financial resources. All of the traffic in the primary and secondary markets for securities (both company and national) is managed exclusively by investment banks.

Given investment banking's unclear status in EU legislation, resulting structures lack coherent organisation, and activities normally associated with investment banking are often subject to co-organisation, both within investment as well as universal banks.

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<sup>2</sup> Furthermore, we analyse the market positions of various investment banking products including cost-plus pricing, which accounts for risk and lost opportunities.

## Historical overview of investment banking

Although banks and banking, understood as a direction in capital market development, date back to early modern Italy, securities trading emerged in the age of industrial revolution in England and also as a result of flourishing commerce during Britain's colonial expansion.

The 18th c. saw the rise of consortia associating industrial or commercial organizations with financial structures (banks). The boundary between the domains of money and trade grew "hazy" on both sides. British merchants turned to money trading as an additional source of income, which had been made possible by the development of the capital market, a market for securities, in the 18th and 19th centuries. A particularly vivid indication of growing investment activity as regards money turnover was the creation of the East India Company, which was a quasi-joint-stock merchant company. The East India Company, the London Stock Exchange, founded in 1802, as well as the Clearing House – a financial institution offering settlement services for the clients of London banks – became the cornerstones of the first stage of the development of investment banking. The creation of investment banking was, undoubtedly, associated with the circulation of bills, where major merchants accepted the bills of smaller ones before turning them to banks. In the 18th century, which saw the beginning of Great Britain's maritime – military and merchant – dominion on the seas, any merchant who had enough money to hire a ship with a crew could easily engage in global trading. In addition, the British law of the time provided merchants with (under certain terms) the protection of the Royal navy. By transforming their businesses into merchant banks and accepting houses, the tradesmen who accepted bills of exchange started to take on a number of functions which, in a later time, gave rise to investment banking.

The development of investment banking continued in continental Europe, where the notion took root with deposit and credit banks, which started to offer brokerage in securities transactions, mainly to private investors (Szelałowska, 2009, p. 22 and nexts).

Just like the colonial expansion and industrial revolution in Great Britain spurred the development of investment banking, so did the construction of the transcontinental railroad trigger its rise in the United States, with the idea further enkindled by the American victory in the war with Mexico and considered to be of strategic importance for the economy. However, it was not until after the American Civil War that the idea was truly realized<sup>3</sup>. The endeavour was financed mainly through bonds and shares distributed among private investors. European banks recognised this unique opportunity and engaged in brokerage.

Investment banks were created as a result of merging American private banks with investment houses of mainly European provenance. It was also then that two German-Jewish emigrants founded the famous Lehman Brothers.

The crisis of 1929-32 saw the collapse of every fourth bank and quasi-bank in the United States (a total of 5500 banks went bankrupt at the time), which was brought about mainly by speculative investments.

An important stage in the history of investment banking was its separation from deposit and credit banking by force of the Glass-Steagall Act of 1933. It was also then that the scope of

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<sup>3</sup> However, if the creation of the Stock Exchange and Wall Street (when long-term war debt securities were being bought up en masse and very cheaply following the end of the Civil War) was taken to mark the beginning of investment banking in the United States, the 1780s would be the time of its initial development. The idea of Wall Street was conceived when groups of bankers started to buy up U.S. government bonds, usually at a very low price, issued as part of soldiers' pay or in exchange for contributions to the Continental Army. Although this „parasitic” relation of people who remained neutral during the American War for Independence (trading with both sides) towards their fellow citizens has always been considered to be morally ambiguous, it is still recognised to mark the beginning of Wall Street.

investment banking activity was delineated; since then it was the responsibility of investment banks to organise and guarantee emissions, as well as actively participate in securities transactions (which included at least a temporary proprietorship of those securities). This caused some banks to change the nature of their activity, e.g. J. P. Morgan became a deposit and credit bank, while Morgan-Stanley switched to investment banking. Governmental supervision of investment banking was to be effected via the *Securities and Exchange Commission* (SEC).

As the time passed and the investment banking sector developed, banks began to consolidate and oligopolistic structures came into being.

Beginning with the 1970s, businesses had grown interested in acquiring financial resources from the capital market. New investment banks sprang up and some commercial banks moved to the investment sector, when finally the Gramm-Leach-Bliley Act of 1991 removed the former division of the banking sector into commercial institutions, companies operating in the capital market, and insurance companies.

Also in the 1980s and 90s the investment banking sector expanded particularly robustly. B. Mason (2009, p. 77-81) distinguished a number of factors that encouraged the development of investment banking at that time:

- 1) the development of old and appearance of new financial instruments,
- 2) ongoing globalisation of financial markets,
- 3) an increase in demand for this type of capital, which had been caused by company fusions and takeovers in which investment banks were directly involved - catering to those became one of the central products of investment banking,
- 4) supervising privatization,
- 5) the development of investment banking products intended for private clients, financial management, brokerage services, and financial consultancy.

In the 1990s many commercial banks (following the division of the Glass-Steagall Act) entered – or returned to – the investment sector. Perhaps the most famous case was that of J. P. Morgan's, which had engaged in investment banking activities even prior to the Gramm-Leach-Bliley Act.

The subprime crisis at the beginning of the present century was, beyond all doubt, a result of the Gramm-Leach-Bliley Act and of the changes affecting some segments of the investment banking market, e.g. a decrease in national properties earmarked for privatisation. However, what still played an important part at the turn of the 20th and 21st centuries were the incomes obtained via stock market expansion of entities specialising in modern technologies, as well as certain U.S. regulations, e.g. the one requiring private companies to go public after exceeding 500 shareholders. Those incomes were associated with both the introduction of subjects to the primary market and trading their papers on the secondary market.

Business overheating happened, after the peak time of 2000, in the second half of 2003. The reputation of investment banks sustained a heavy blow when the prices of shares recommended to private customers by so-called financial advisors began to fall.

In the years to follow, investment banks turned to yet another field of activity; namely, the turnover of securities resulting from long-term private loans. Attractive mortgages had, undoubtedly, fostered the growth of the construction market, but also increased the level of private debt, which banks had optimistically regarded as repayable. In a capitalist economy, in which only pensioners have a guaranteed source of income, such an approach is extremely risky. This risk became all the more apparent in 2007-2009, which saw the collapse of Lehman Brothers – one of the largest, and in 2006 still boasting the fifth largest volume of profit in the world (46.7 bn dollars), investment

banks. The losses of 9 largest investment banks caused by misplaced loans and bottoming prices of shares reached 1/3 of a trillion dollars between mid-2007 and mid-2009<sup>4</sup>.

Beginning with 2003, American investment banks started to engage heavily in the emission of Collateralized Debt Obligations (CDO). Worth trillions of dollars, this involvement of investment banks eventually precipitated the subprime crisis of 2007. During the crisis, the value of those banks plummeted, following the decline in value of mortgage-associated securities.

Cajoling clients into risky loans, as well as the banks' own losses, caused investment banks to lose credibility and reverberated heavily throughout the whole segment.

Initially, the system tried to fix the situation without external assistance. Some banks used this opportunity to obtain the controlling interest in rival companies. In March 2008, J. P. Morgan Chase took over Bear Stearns (for 10 dollars per share, while in 2007 the price oscillated around 140-160 dollars). In September, Merrill Lynch was taken over (its assets amounting to over one trillion dollars) by the Bank of America for 50 bn dollars (29 dollars per share). No one gave "a helping hand" to Lehman Brothers (613 bn dollars in debt), when the FED decided to bail out the Bank of America, which considered taking over the Brothers, instead. Lehman Brothers filed the entry of an Order for Relief and so, according the American bankruptcy law, declared bankruptcy (Wszeborowski, 2008, p. 168 and nexts).

Goldman Sachs<sup>5</sup> and Morgan Stanley transformed into universal banks, which made them subject to the FED's regulations, but also allowed them to apply for financial assistance within the Emergency Economic Stabilization Act (The Paulson Plan) (Nawrot, 2009, s. 36).

## Products of investment banking

According to the typology used, among others, by R. Walkiewicz (2001) investment banking products are available in:

- 1) specialist banks – investment banks,
- 2) general banks – universal banks.

The difference between the two groups lies in the fact that investment banks do not offer credit and deposit services.

Generally speaking, investment banking covers all sorts of operations on securities of its customers in the primary and secondary markets, financial consultancy (also regarding investments) for business (corporate) clients, as well as managing special funds of their private customers. Typically, investment banks offer investment services in their brokerage offices.

The areas of investment offered by such banks are:

- 1) *Mergers & acquisitions* – as part of such services, banks, most importantly, match parties interested in a merger and mediate through the process, also assessing the value of the parties. Those services also include protection against hostile takeovers (acquisitions), especially in capital markets.
- 2) *Corporate finance* – aim mainly to optimise the capital structure of a company. This includes emitting customers' securities and exploiting trends on the stock exchange in order to intermediate during the buying of shares. Other activities covered by such services are: bond transactions, loan restructuring, stock-exchange and over the counter methods of increasing the capital of public companies.

<sup>4</sup> Adequate: (1) Citigroup: 56,6 mld \$, (2) Bank of America: 56,6 mld \$, (3) UBS: 53,1 mld \$, (4) JP Morgan Chase: 41,1 mld \$, (5) Morgan Stanley: 22,7 mld \$, (6) Deutsche Bank: 18,8 mld \$, (7) Credit Suisse: 17,5 mld \$, (8) Societe Generale: 11,4 mld \$, (9) Goldman Sachs: 7,9 mld \$.

<sup>5</sup> Known in Poland mainly due to its speculation with the Polish zloty.

- 3) *Structured markets* – in this respect, banks organise so-called road shows and underwrite the issuance, guaranteeing that they will purchase for their own portfolio all the securities which are not sold in the original subscription.
- 4) *Sales & trading* – this function is associated with acting as a dealer or a brokerage in the secondary market for securities, hoping that the papers will appreciate in value or relying on the fee for matching two parties for a contract. Discount brokerage services are usually offered by brokerage offices which put up offers of purchase or sale on the financial market. A full brokerage typically offers recommendations along the pattern of buy-keep-sell.
- 5) *Asset management* – is associated with granting an investment bank the authority to manage one's financial resources basing on certain obligations as regards goals set by the customer. At the very least, such goals have to define maximum acceptable risk and the scope of investments. This type of activity is typically found in fund management. Individual investment strategies are, in general, limited to situations involving considerable sums of money or their equivalents; under normal circumstances, one of the bank's standard investment models is followed. Managing hedge and venture capital funds is also realized as part of such services.
- 6) *Principal investment* – involves purchasing shares in other companies with the bank's own money. In fact, universal banks allow to convert debt in exchange for shares or stock of the indebted company. This type of practice of investment banks usually entails waiting for the moment when the company whose shares were obtained goes public.
- 7) *Research* – although analyses are conducted primarily for banks themselves, some of them are made available to clients.

## **How investment banks operate**

As we have already mentioned above, investment banks (of the classic variety) typically engage in a number of activities:

- 1) organising primary issues in the capital market. This type of activity is the most characteristic of investment banks – organising issues of debt securities (government or private) or initial public offerings (IPO) of shares. Or secondary – seasonal offerings. Organising a primary issue carries the risk of overpricing or underpricing of shares. In either case, the issuer may lose money. During a secondary issue, it is much easier to determine the market equilibrium price, which usually involves setting the price slightly below (at a discount) the current market price of shares. Each issue is composed of three characteristic stages:
  - a) analysing the situation and laying out the issue. The bank assists the issuer in analysing the project and assessing potential risks, determining the volume, form (bonds, shares), best time and price of the offering. It is possible that as a result of the process novel and unique papers are created. This is how hybrid securities, which combine the properties of shares, bonds and junk bonds, came into being.
  - b) the investment bank provides the Securities and Exchange Commission with all the necessary data, and later, once the issue of securities has been authorized, prepares an underwriting prospectus. The American Securities Exchange Act of 1934 has established a model for all such regulations.
  - c) underwriting is the most important service that investment banks can offer to their customers. It commits the bank to purchase a certain (minimal) number of securities, or buy the remaining ones, at a price specified in the agreement. Thus, the bank is able to guarantee that the issue will be absorbed by the market, even if the demand is weak.

The price at which the investment bank purchases securities is lower than their issue price, i.e. it includes a discount. If this is specified in terms of percentage, the percentage is the smaller, the greater the overall value of the issue. Typically, the issuer's main bank spreads the risk by forming a syndicate of companies (or financial institutions) to secure the issue. Sometimes such syndicates count many members, encompassing several groups of underwriters representing different degrees of commitment and risk. Some other variants include:

- agreeing to prepare the issue “with due care”, but without the requirement to purchase securities – a so-called *bought deal*. In a critical moment prior to the securities issue, a leader or an insurance group puts forward an offer (percentage and purchase time), which the issuer may accept or decline. If the offer is accepted, the underwriter may change the conditions of the market issue,
  - an auction (competitive bidding) – interested parties submit their offers,
  - first option for holders of securities (during a secondary issue),
  - standby underwriting: the underwriter purchases an unsold portion of the issue IPO is particularly important in privatisation.
- d) selling and distribution. An investment bank or a syndicate has to resell all the securities it had been required to purchase as the underwriter. If it is a syndicate, the securities are sold at a commonly agreed-upon price. Should the shares find no buyers, the syndicate is dissolved and each party attempts to sell the papers on their own. And on their own conditions. The sale may be directed at institutions (wholesale, “in blocks”) or private investors. In the latter case, the investment bank uses its branches and brokerage offices to reach customers. Regional investment banks often engage in retail sales.
- 2) trading in the secondary market. An investment bank may operate on the secondary market as a brokerage or a dealer. In the first case, the brokerage only associates offers of sale with offers of purchase, for which it charges a commission. In the second case, the bank trades on its own, profiting from margins and, perhaps, capital gains (when securities appreciate in value). The following strategies are adopted in order to make a profit:
- a) looking for safe arbitrage profits,
  - b) risky arbitrage profits.
- 3) private placement. It's offering and selling securities only to chosen investors. This is the exact opposite of a public offer. This strategy is especially suitable when dealing with large institutional investors. In the United States, 200 bn dollars were thus allocated in 1990 alone. In practice, limited sales to chosen investors are much easier than public offers as they are not required to be authorised for public trading by a relevant body (such as KPWiG in Poland). In Poland, a limited offer has to be addressed to at least 300 investors. A rights issue is usually used during privatisations, when the number of potential strategic investors is limited. In this case, a memorandum is filed, but it does not have to incorporate so much information as a prospectus, nor does it require authorisation. Rights issues are typically used to introduce new types of securities into the market. After they have “passed the test” of the market, they may be authorised for public trading. This is especially the case with risky securities or when the issuer has low credibility. The bank's fee is greater and more varied.
- 4) securitization of assets (e.g. of bank loans) may be applied to so-called difficult loans (e.g. given by commercial banks). Securitization of receivables, such as, for instance, commercial loans, transforms assets into securities, which are easier to value and sell. In order to secure future, and more liquid, issues, a pool of securities is created. In practice,

securitization is usually applied to mortgages, car loans, payments to health insurance companies, etc. In the United States, nearly 40% of loans were transformed into bonds in the period between 2005-2010. The transformation was effected through federal government institutions. Securitization is part of financial engineering, a strategy adopted by various organisations (e.g. banks) to improve their liquidity, ratios (liquidity, rate of return) and, consequently, reduce the cost of capital. On the other hand, however, what the mechanism really does is merely transfer the title of the debt and change its character, so, financially speaking, it is a fictitious operation. Securitization entails regrouping and reclassifying receivables. For instance, the payback period and interest may change. The degree of assessed risk changes as well. The receivables are purchased by a special financial institution (an investment trust) created specifically for this purpose. Currently, not only mortgage-backed securities are issued, but also so-called asset-backed securities (e.g. securities collateralized by credit card receivables). The bank may securitize the assets on behalf of its client and secure the issue of new securities (then the spread is very large). It may also purchase collateral assets and issue its own securities.

- 5) mergers and acquisitions (M&A) Only specially created, separate bank departments are charged with this highly professional activity. Economically speaking, fusions are motivated by what is called a synergy effect – the combined value of two companies may be greater than the sum of its parts. Very frequently, investment banks act as advisors for both sides. For instance, during the Conoco merger, First Boston and Morgan Stanley earned 15 million dollars each. Mergers and acquisitions may also be achieved through:
  - a) via leverage of capital - borrowing money to acquire a controlling interest in a company (LBO);
  - b) through restructuring, e.g. by selling a portion of selected corporations;
  - c) inducing legal bankruptcy (insolvency).
- 6) direct sponsorship (merchant banking). Merchant banking takes place when an investment bank invests its own resources (into equity or debt). If it becomes a shareholder, its position is usually high. When acting as creditor, the bank typically provides bridge financing (whenever additional financial resources are needed right away, e.g. during an LBO). Since the deal carries a significant risk, the interest on the loan is high.
- 7) an investment bank as a source of consultancy and advice Numerous investment banks have their own consultancies or departments devoted to that purpose. As seen by the banks themselves, engaging this type of activity has a marketing value.
- 8) creating risk management instruments. Issuing derivatives, e.g. creating options, debt-to-equity swaps.
- 9) funds management (e.g. investors' portfolios), so-called money management.
- 10) others actions:
  - a) storing securities,
  - b) giving loans for the purchase of offered securities,
  - c) managing open accounts of investors.

Currently (mid-2011), the abovementioned activities are typical of investment banking. The system is, nevertheless, constantly developing, which means the introduction of new investment banking products is simply a matter time.

## **Investment banking in Poland**

In Poland, investment banking services are provided by domestic universal banks and the branches of foreign investment banks (Kacperska, 2004, p. 21-32; Martyniuk, 2007, p. 97-110;

Polak, 2006, p. 271-289; Stepniak and Umiński, 2008, p. 51-59). The main services of investment banking in Poland include mediation in the capital market, operation in the money market, financial consultancy, and financial management. As regards banks' income, independent trading in derivatives and M&A operations are also of some significance.

Poland's market for investment banking is still developing, however. The fact that Poland weathered the recent financial crisis, or at least the initial subprime debacle, was not thanks to some effective policies of Tusk's administration (or, as the liberals would have it - the lack thereof), but simply because Polish capital markets are so weak that the most common way of financing business undertakings is through credits (or possibly general-purpose loans), not stock markets. That all the credit for withstanding the crisis should go to the government and Tusk himself is nonsensical, such notions are merely meant to promote the PO-PSL government. The fact that Poland has not entered, despite the efforts of Euro-enthusiasts, the collapsing Eurozone is the reason why our country had not been affected in the second stage of the crisis.

Despite all that, Poland found itself in the crosshairs of many foreign specialist banks. Some of the most powerful investment banks operating on the Polish market, while continuing their expansion in Eastern and Central Europe and hoping to make some profit on the privatisation of the remaining state-owned companies in Poland, are the following:

- 1) UBS – operating in Poland since the 1990s. Permanently established in Warsaw since 2003; their Business Shappard started up in Krakow in 2008. In 2010, UBS acted as issue agent for treasury bonds worth 475 million Swiss francs and coordinated the privatisation of Tauron.
- 2) Credit Suisse – in Poland since 1992, focusing mostly on the primary and secondary markets for shares, asset management for institutional clients and wealthy private customers; moreover, it has offered private banking services for prosperous clients since 2009. CoE (Centre of Excellence) – the group's business centre for Europe and North America - was opened in Wroclaw in 2007.
- 3) UniCredit CAIB (Poland SA) – specialises in offers on the primary market, financial consultancy, M&A activities, privatisation, restructuring, and obtaining financial resources for project finance and structured finance endeavours.
- 4) HSBC – responsible for the organisation of bond issues, including the USD government bond issue in July 2009, (worth 3.5 bn dollars), an issue of EUR-denominated 15-year bonds in January 2010 (worth 3 bn euro) and EUR-denominated 7-year bonds in March 2010.
- 5) Morgan Stanley – gives its clients an interesting opportunity to invest abroad through its offices located all around the world (a total of about 1200). Its permanent office in Poland is in Warsaw.

## **Conclusion – perspectives on the development of investment banking in Poland**

Undoubtedly, investment banking is essential to the proper allocation of capital and to organising the issue and transfer of financial instruments between their former owners and market players looking for a medium for their savings.

Investment banks prove to be indispensable whenever a company lacks proper funds, or is unwilling to employ its own liquid assets, to undertake a large investment initiative. However, given the distrustful attitude of customers towards investment banks, strategic positions in the banking sector will likely be taken by retail banks (vide: *Privatkundengeschäft*, for day: 15.08.2011).

Huge losses brought about by the financial crisis have already confronted the bankers' optimism with the harsh reality of "abstractly valued" securities, which will, beyond all doubt, affect

banks' future policies and their attitude to risk. Some voices in the United States already call for a prompt introduction (within the next 4 years) of a statutory ban on the turnover of securities purchased by banks and maintained by universal banks. If this indeed came to pass, banks would only be able to mediate in the turnover.

Switzerland plans to undertake different, yet no less strict, actions. The said restrictions will set the capital conditions for creating and maintaining financial risk reserves.

The United States and Switzerland are not alone in their efforts to prevent the collapse of the banking system, especially those of its structures which go beyond investment banking.

Everything indicates that the number of products classified as financial instruments will dwindle. First of all, the derivatives market should be limited as it is associated with a high, sometimes even unpredictable, risk. In accordance with market principles (especially those of the services market), if there is no demand or it is not possible to create it, supply disappears.

## References

- Kacperska, E. (2004). Bezpośrednie inwestycje zagraniczne w sektorze bankowym w Polsce. *Zarządzanie Ryzykiem*, No 4.
- Mason, B. (2009). *Finansowy kataklizm. Koniec wieku chciwości*. Kraków: Wyd. UJ.
- Martyniuk, Z. (2007). Dunning's Paradigm and Foreign Direct Investments in the Banking Sector in Poland. *Acta Universitatis Lodzianensis. Folia Oeconomica*, Z. 212.
- Michalczyk, L. (2012 – in press). Możliwości wykorzystania metody AHP w analizie wyceny kosztu produktów bankowości inwestycyjnej. *Pieniądze i Więź* (in press).
- Nawrot, W. (2009). *Globalny kryzys finansowy XXI wieku. Przyczyny, przebieg, skutki, prognozy*. Warszawa: CeDeWu.
- Polak, W. (2006). Udział bezpośrednich inwestycji zagranicznych w sektorze bankowym w Polsce, *Zeszyty Naukowe Gdańskiej Wyższej Szkoły Administracji*, Z. 3.
- Privatkundengeschäft im Aufwind – Investment – Banking verliert an Boden, Obtained from: [www.open.eu](http://www.open.eu) (15.08.2011).
- Stępnia, A., Umiński, S. (2008). Bezpośrednie inwestycje zagraniczne w polskim systemie bankowym. *Kontrola Państwowa*, 53 (5).
- Szelańska, A. (2009). *Współczesna bankowość inwestycyjna*. Warszawa: CeDeWu.
- Walkiewicz, R. (2001). *Bankowość inwestycyjna*. Warszawa: Poltext.
- Wszoborowski, T. (2009). Koniec ery niezależnych banków inwestycyjnych w USA. In: E. Pietrzak i M. Markiewicz (red.), *Rynki finansowe w warunkach kryzysu*. Gdańsk: Wyd. UG.