

2. How Ukrainians make money out of their ideas. http://project.liga.net/projects/just_business/ Date of retrieve: [02.12.2018].
3. Loshkovska, Kh. S. (2014). Creative industries as a modern segment for strategic development of countries of the world. *Topical issues of foreign affairs* (119): 153-158.
4. Landry, C. (2006). *The creative city*. (V. Gnedovskiy, M. Khrustaleva, Trans.). Moscow: Classics XXI: 399.
5. Turskyi, I. (2016). Global and regional trends of creative industries and their development prospects in Ukraine. <https://elartu.tntu.edu.ua/> [02.12.2018].
6. Glaeser, E. (1998). Are Cities Dying? // *Journal of Economic Perspectives*. No 12: 139–160.
7. All You Need to Know about Ukrainian IT Outsourcing in 2017 (2017). <https://www.nix.com/need-know-ukrainian-it-outsourcing-2017> [02.12.2018].
8. 2019 annual work programme for the implementation of the Creative Europe Programme. (2018) <https://ec.europa.eu/programmes/creative-europe/sites/creative-europe/files/library/c-2018-6687.pdf> [02.12.2018].
9. Collins, P., Cunningham, J. (2017). Creative Economies in Peripheral Regions. // *Business & Economics*.: 229 p.
10. Creative nation: Commonwealth cultural policy (1994). Department of Communications and the Arts (Australia): 102 p.
11. Eurostat. – [https://ec.europa.eu/eurostat/web/products-eurostat-](https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20180222-1?inheritRedirect=true&redirect=%2Feurostat%2Fweb%2Fculture%2Fpublications) [news/-/DDN-20180222-1?inheritRedirect=true&redirect=%2Feurostat%2Fweb%2Fculture%2Fpublications](https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20180222-1?inheritRedirect=true&redirect=%2Feurostat%2Fweb%2Fculture%2Fpublications) [02.12.2018].
12. Global Creativity Index by Country. – <http://chartsbin.com/view/41109> [02.12.2018].
13. Howkins, J. (2011), *The Creative Economy* // The penguin press, NY: 288.
14. Horkheimer, M., Adorno, T. (2002). The culture industry: Enlightenment as mass deception. // In Gunzelin Schmid Noerr (Translated by Edmund Jephcott. Stanford, CA: Stanford University Press.) *Dialectic of Enlightenment*: 94–136.
15. Jacobs, J. (1984). *Cities and the Wealth of Nations*. New York, Random House: 257.
16. Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life* // New York, Basic Books: 404.
17. Porfirio, J., Carrilho, T., Mónico L. (2018) Entrepreneurship in different contexts in cultural and creative industries. – <https://www.sciencedirect.com/science/article/abs/pii/S0148296316302533?via%3Dihub> [02.12.2018].
18. Sondermann, M. (2009). *Culture and Creative Industries in Germany* // Federal Ministry of Economics and Technology. – Research Report No 577: 27.
19. UNCTAD stat. – <https://unctad.org/en/Pages/DITC/CreativeEconomy/Creative-Economy-Programme.aspx>. [02.12.2018].

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MARKET MULTIPLE "ENTERPRISE VALUE/APPRaised BRAND VALUE" QUANTITATIVE DETERMINATION AND ITS COMPONENTS CROSS-CORRELATION RELATIONSHIP ANALYSIS

Summary. “Enterprise value/Appraised Brand value” market multiple use possibilities in applied econometrics field, or rather in assets independent valuation/appraising, are educed and analyzed. Methodology and quantitative indexes of that multiple are offered and obtained on the concrete example of brand name valuation. It is set that such special intangible assets, as brand name and goodwill, are able to change their value characteristics in both directions and change the annual depreciation/obsolescence sign during the separate periods of economic life, made it positive or negative. Obtained quantitative indexes of “Enterprise value/Brand name value” market multiple are analyzed and interpretation of these results is executed. This multiple high sensitivity to the influence of market value changes sources for this class of researched intangible assets is set. It is educed that there is close high-density statistical relationship between the appraised trademark value indexes and enterprise market value. It is showed that at brand appraising/valuation procedure is not recommended to apply any accounting book-keeping amortization indexes, as they are not the reliable indicator of factual depreciation/obsolescence. It is educed that for these types of intangible assets researched depreciation/obsolescence mainly depends on their advertizing and information support, which are measured by associated cash flows expenses, invested by owner in its development. It is set that during the period of brand existence a multiple change of its depreciation/obsolescence sign on the separate time periods is possible. For brand it depends on sufficient informative and advertisement support implementation, that’s why these price-

forming factors must be taken into account at market value and depreciation/obsolescence determination procedures. In this connection it is possible to assert that brand value is very sensitive to these parameters change, which are considered as rapidly variable price-forming factors with high dynamics indexes. It is proved that high positive value of the correlation coefficient, obtained for "Enterprise value/Appraised Brand value" market multiple components, give grounds to characterize degree of its statistical relationship density as suitable for use in evaluation purposes.

Key words: market multiple; brand name; trademark; independent valuation/appraising; market value; intangible assets; depreciation/obsolescence.

Introduction and overview. In the field of applied econometrics, especially – of independent expert real estate and property rights evaluation, a number of market multiples are used. Usually these multiples are determined as appraised enterprise market value to certain constituents of capital base ratio. As the capital base constituents some various economic indicators of enterprise activity are usually used. In this context considerable interest presents research of relationship between total enterprise value indexes, appraised as on-going operating business value, and appraised brand/trade mark value. In this way the part of brand value in total enterprise value can be defined.

Relevance of the chosen topic. Literature review. Brandname, which is the commercial name of enterprise' branded business, is indissolubly related to its business reputation, goodwill. The name of brand, or brandname, after it became popular for consumers and business partners, brings to the enterprise not only economic preferences, but also deserved public confession and consumers respect. Therefore an absolute title value of brand using must be considered not only as an object of intellectual property that has a fully certain market value index, but also as important intangible asset advantage [1, p. 116], which is the main part of goodwill basis. There is established that intangible assets surplus value, such as business reputation, brand, know-how, patents, copyrights, which are not represented in accounting balance, presents in "Coca-Cola" in evaluation of 96%, in IBM - 83%, in British Petroleum - 71% of these companies total market value. The whole set of the above mentioned intangible assets types unites are consolidated in the concept of goodwill. On other sources, about 75% of "Coca-Cola" market value is determined by the combined value of trade marks, which belongs to this company. When "IBM" executed the "Lotus" company – computer software programs supplier – takeover, the market value of "Lotus" at last exceeded its published accounting value in almost 15 times. In this case "IBM" paid 3.5 USD bln for a company that was appraised in 230 USD mln only. The reason is that the "Lotus" owned a large number of intangible assets - for example: trademarks, permanent regular customers' lists, high professionalism of personnel, accrued software developments and other [2, p. 45].

Above mentioned examples of material and intangible assets value correlation also are confirmed by examples of Ukrainian practice. So, in 2005 the sale of 93.5% stock share capital of "Aval" bank to Raiffeisen International of Bank Holding for a 1.028 USD bln, more than 20% of this price presents the brand value [3, p. 19]. Thus, in large and economically

successful Ukrainian enterprises appraising, potential investors more often pay attention to its intangible assets value. From the source of Ernst&Young company, in the property assets structure of some worldwide most valuable corporations (just like Disney, Microsoft, Nike etc.) intangible assets now presents over a half of total company market value [4, p. 349; 5, p. 21]. The trademark high priority for the goodwill value is also marked in [6, p. 24]: "goodwill foremost is the public opinion about the brand name, trademark, style, logotype, projects, commodities, customer relationships, and any other intangible objects, that are in property or under control of a company". A brand/trademark is in this context must be considered as an external objectification of goodwill, as the separately identified intangible asset.

It especially touches hi-tech and knowledge-intensive enterprises. For example, the Microsoft corporation, having market capitalization appraised in the few hundred USD blns, counts on book-keeping balance of material assets only on a few USD mlns. For such companies intangible assets and goodwill, are created by them, becomes a dominant factor in company market value basis. Jasyshena, V. V. & Poslavs'ka L. I. showed, that in market conditions a trade mark is one of main instruments, that influences on a competitiveness and enterprise market value, and influence of intangible assets on the enterprise market value increase often is more significant, than material assets of company [7, p. 44].

A number of researches confirms high prevalence of companies' valuation on the multiple basis. Comparative analysis of multiple-based evaluation methods use frequency, presented in 2007 by the analysts of Morgan Stanley Research, showed that traditionally most often are used multiples of profits earnings and cash flows. On the conclusion of analysts of Merrill Lynch, on the first place there is an index of earnings cash flows. This index, on questioning results, was a leader in 2001 among 23 considered multiple coefficients and retains steady interest of appraisers - about 46% of analysts taking part in questioning used it constantly. So, recommendations on the multiple indexes selection most often are concerned on EV/EBIT (Enterprise value/Earnings before interest and tax) and EV/EBITDA (Enterprise value/Earnings before interest, tax and depreciation) market multiples. Also the P/E ratio, or the PER (Price-earnings ratio), PEG (Price/Earnings to Growth ratio) which are based on the ratio of a company's share/stock price to the company's earnings per share, are widely used [8, p. 1; 9, p. 44; 10, p. 135.]

In compare with Income Approach, in particular – Discounted Cash Flows (DCF) method, multiple-based methods of Comparative Sales Approach, such as price-to-earnings (P/E), price-to-revenue, or price-to-book value ratios, that are compared to historical norms or to other firms in the same industry, are inferior heuristics even though they may at times yield valuation estimates equal the DCF method results [11, p. 6]. Asquith, P., M. Mikhail and A. Au established that various discounted cash flow methods for share valuations were used in only 12.8% of the reports, while 99.1% of them use multiple-based methods, and mainly used are ratios on different types of income - P/E, EV/EBIT, EV/EBITDA. Asset multiples were applied in 25.1% of the report, but other share valuation methods were used very rarely, for example, the PEG measure was applied in only 7 of the 1,126 reports [12, p. 245].

Research carried out by Błażej Prusak shows that Polish financial analysts apply for valuation purpose, the following methods, are classified as belong to Income Approach: DCF, discounted residual income (RIV) and the dividend method. The significance assigned to income methods is then compared to that of the market approach. The analysts attribute significance to individual methods in a subjective manner, but generally it can be established that they treat income methods and the market approach as having equal importance in about 69% of the cases and they favor income methods in about 30% of the observations. Comparative Sales Approach, based on multiples methods, were used in 503 of total 560 number of observations, what means 89.82% [13, p. 423]. Pablo Fernandez noted that the typical errors when using multiples are, in particular, using the average of multiples extracted from transactions, executed over a very long period of time, and using the average of transactions multiples that have a wide scatter. [14, p. 29].

In this connection great scientific interest presents the research of quantitative parameters determination of relationship between the intangible assets value - and, in particular, the brand value of enterprise - and its total market value. Determination of enterprise market value with the use of Comparative Sales approach methods may be based on the use this multiple. A market value/any price-forming factor ratio multiple is a coefficient that shows a relationship between total enterprise value index and the selected element of capital base. So, a capital base of evaluation multiple is a measuring instrument that reflects some financial results of enterprise activity and on-going business economical efficiency. In nowadays evaluation practice two types of multiples are used: interval and one-moment. At evaluation procedure performing it is recommended to apply a few multiples simultaneously, that allows to produce results information statistical processing [15, p. 241].

It is established that at the estimation of large companies evaluation procedure performing great number of indexes, reflecting enterprises economical activity and influencing on their stock price course, is

wide enough and heterogeneously manifold. Hereupon for appraiser is difficult enough to define reasonable preferences about the most adequate informative parameter, relative to measured value, in different indexes plurality [16, p. 23]. Results are got on the alternative indexes of capital base constituents will be different one from other, as a result of different cross-correlation relationship density between the enterprise market value indexes and indexes of separate constituents of capital base is used. Therefore the resulted concrete value estimation can be presented as, for example, weighted average value got from a few indexes, with taking into account the reliability degree of statistical data on each of the market multiples [17, p. 35]. So, executing evaluation procedure, appraisers analysts try to use the maximal number of the most reliable multiples for calculations, because different multiples application of general capital base leads to a few variants results definition that substantially will differ one from another. Range of the got results divergences can be wide enough, that is why the greater amount of used multiples will help to reduce by appraiser the most reliable value interval. This procedure is based on mathematical methods, but there are also economic criteria that ground the reliability and objectivity of these economical measurements on multiple kind selection [18, 2014]. That's why research of statistical relationship between total enterprise value indexes, appraised as on-going operating business value, and appraised brand/trade mark value, are the urgent task of today.

Scientific problem formulation.

Valuation/appraising of intellectual property rights objects, such as brands and goodwill, using the Costs Approach/Compared Sales Approach combination, is based on different economic indicators of enterprises. These indicators are used as a primary data for market value determination. These indexes are differently related to the brands value, and statistical relationship between these parameters researches, indisputably, presents both theoretical and practical interest. Because of the closeness of cross-correlation relationship between assets market value and these primary data parameters directly depend evaluation results accuracy and reliability.

Identification of previously unsettled parts of the general problem. Contradiction and incompleteness of given data in the various sources, concerning the problem of relationship between the indexes of the total enterprise value, appraised as a value of operating business, and its brand value, with the use of that this business is conducted, makes actual the question of quantitative determination and dynamics research of market multiple, that links these two indexes. The decision of this problem has an important value for practical activity in the field of the independent evaluation of brand property rights value.

Purpose of the article. The purpose of the article is possibilities analysis of the market multiples "total enterprise market value/the appraised brand value" use in property rights independent evaluation. To define the quantitative estimations of cross-correlation

relationship strength between these economic parameters, which are used as primary data source in Costs Approach/Compared Sales Approach combination. To perform the comparative analysis of cross-correlation relationship density between the brand value, appraised as intellectual property object, and total enterprise market value, used as the main price-forming factor. Researching and approbation of this multiple quantitative indexes determination methodology on the certain example of brand evaluation. Dynamics time changes research of total enterprise market value and appraised brand value. Analysis implementations of the offered multiple quantitative indexes and its interpretation. Determination of perspective directions of further researches in independent expert evaluation methodological base development context.

Theoretical background. Trademarks and goodwill, which are very specific intellectual property types of intangible assets, are able to change their market value both in the direction of decrease, what means positive depreciation, and in the direction of increase - what means negative depreciation. So, during the economical life period their market value may vary in both directions, demonstrating alternating sign-changeable depreciation. For successful enterprises brands there is a general tendency to increase their value over time, accordingly with enterprises appraised value - which means a negative depreciation of both parameters. But the characteristics of the value change in time of assets listed above, used in accounting documents, do not correspond to the actual value time changes. Annual depreciation/amortization indicators, are used in book-keeping, accounting and financial reports documents, very often suggests brand value reduction over time only. In fact, it is growing rapidly in the same time – but accounting standards and rules does not take into account the possibility of these intangible assets value factual increase, i.e. the negative depreciation presence [19, p. 393].

Earlier we formulate the conclusion about the inexpediency to use the accounting data for depreciation/amortization in trademark value determination, executed by the Costs Approach/Compared Sales Approach combination methods. That's because book-keeping, accounting and financial reports documents data are only the consequence of the completely conditional rules for assets accounting use, set by the normative regulatory framework for the financial statements. It was proved that these data are not related to factual changes of intellectual property objects market value [20, p. 728; 21, p. 216].

Often there are paradoxical situations when value of intellectual property objects is reduced, according to the accounting data of depreciation/amortization, and evaluation practice in the same time confirms the fact of its value multiple increase. For the independent evaluation, when the Costs Approach/Compared Sales Approach combination is applying, we can state absolute inappropriateness of accounting data

considering for intellectual property objects with alternating depreciation sign valuation [22, p. 48]. So, the correct choice of adequate indicator, which determines the relationship between total enterprise market value and the appraised brand value is the pressing problem of today. The fact of both these parameters negative depreciation, demonstrating a tendency to increase their value over time synchronously, allows suggesting to use one of these parameters is known, as primary data source for value determining of other.

Hypothesis. The work is verification of basic hypothesis, in obedience to that at the brands valuation/appraising procedure performing as primary data parameters may be recommended to use those indicator parameters, which are characterized with the functional or closest statistical relationship and, respectively, the highest cross-correlation coefficient. Research is based on fact that these intangible assets are able to change their value characteristics in both directions, and change the annual depreciation sign during the separate periods of economic life, made it positive or negative. Available primary data suggest that total enterprise market value is closely connected with appraised brand value. Relationship characteristics between these indexes, probably, will open the possibility to use market multiple "total enterprise market value/the appraised brand value" for brand value determination, and otherwise.

Methodology. The general methodological base of the article is scientific and special for the subject sphere of scientific cognition knowledge methods, typical for econometrical researches. The choice of methodological approaches is conditioned by the specific of the economic measurements, which are executed by independent expert appraising/valuation methods. The research is grounded on mathematical simulation and mathematical statistic quantitative methods. Research methodology also envisages generalization of previous publications results from scientifically-research sources and open sources statistic information about the enterprises activity economic indicators. Basic principles of independent expert appraising/valuation made the general methodological basis of the article, in particular - principles of Utility, Substitution and The Highest and The Best Use. To the certain methods of research belongs the method of cross-correlation analysis and time value of money theory elements.

Χονδυχτινγ ρεσεαρχη ανδ ρεσυλτσ. Μαρκετ παλυε οφ ανψ ασσετ δετερμινατιον, βασειδ ον τη ε Χοιστσ Αππροαχη/Χομπαρεδ Σαλεσ Αππροαχη χομβινατιον μετηοδσ, συπποσεσ τη υσε οφ μαρκ ετ πριχε μυλτιπλεσ. Α μαρκετ μυλτιπλε ισ α χοεφ φιχιεντ σηοωινγ ρελατιονσηιπ βετωεεν τη παλυ ατιον οβφεχτ μαρκετ παλυε ανδ σομε εχονομια λ βασιχ παραμετερ. Σο, τηισ βασιχ παραμετερ ισ , ιν φαχτ, α μεασυρεμεντ ινδεξ, ρεφλεχτεδ τη φιν ανχιαλ ρεσυλτσ οφ εντερπρισε αχιτιπιτψ [17]. Ασ ιτ ωασ μαρκεδ αβοψε, τηερε ισ α λοτ οφ μαρκετ μυλτιπλεσ αρε υσε φορ επαλυατιον πυρποσεσ □

Ες (Εντερπρισε παλυε)/ΝΙ (Νετ Ινχομε); Ες/ΟΙΒΑ Α (Οπερατινγ Ινχομε Βεφορε Δεπρεχιατιον Ανδ Αμορτιζατιον); Ες/ΕΒΙΤ (Εαρνινγσ Βεφορε Ιντερεστ ανδ Ταξεσ); Ες/ΕΒΙΤΔΑ (Εαρνινγσ βεφορε Ιντερεστ, Ταξεσ, Δεπρεχιατιον ανδ Αμορτιζατιον) ανδ σο ον [17, π. 38].

The presence of reliable statistical data about the appraised brand value (BV) and total enterprise value (EV) on long-time period gives an opportunity to consider market multiples EV/BV as evaluation instrument, which belongs to the group of one-moment multiples. The reason is that EV/BV coefficient ratio gives us quantitative index in one point only, in one fixed evaluation date. Of course, both appraised brand value (BV) and total enterprise value (EV) are time functions, that's why EV/BV multiple on long-time period also is described by a time function. So, present or expected value of EV/BV multiple can be used for further evaluation procedure, depending on the evaluation date. Such multiple can be used for the increase the number of taking into account variants of expected scenarios, and thus it is able to provide higher evaluation result accuracy for the intellectual property objects, which are the part of company's intangible assets. We assume that as the most suitable primary data parameters for brand evaluation may be recommended those indicator parameters, which are characterized with the closest statistical relationship and, respectively, the highest cross-correlation coefficient with BV. In that case, if, for example, if EV and EV/BV multiple are obtained during any period of time, BV quantitative indexes for present or further period can be easily calculated.

At the beginning of 2018 the annual evaluation results of the world most valuable brands were published. Especially, available is brands rating prepared by Brand Finance Company, authoritative and well-known world-wide independent consulting company in the field of financial strategy and trade marks evaluation. A company was founded in 1996 and during more than 20 years have helped companies and organizations in trademarks evaluation, making possible reliable determination of comparable value indexes.

According to the data of Brand Finance, world leaders among the most valuable trade marks in 2018 were Amazon, Apple Inc. and Google. Apple Inc. defended 2nd place in the ranking, with brand value rebounding to \$146,311 USD mln, after the 27% decline previous year 2017. Apple Inc. has failed to diversify and grown over-dependent on sales of its flagship iPhones, responsible for two thirds of revenue. Poor Q4 2017 sales of iPhone X at only 29 million handsets fell short of expectations, and the model is predicted to be discontinued later. With the advent of emerging world brands like Huawei, Apple Inc.'s increasing focus on what are effectively luxury products may value the brand a fair share of the global mass market, limiting the potential for brand value growth. So, the rank of Apple Inc. brand in 2017 top 10 list was 2, with BV = \$107,141 USD mln; the rank in 2018 top 10 list was also 2, with BV = \$146,311 USD mln and brand rating AAA+ , with increase on 37% [23, p. 1]. On a fig. 1 the trends of time change of these two indexes - appraised brand value BV and total enterprise value EV of Apple Inc. on long-time period 2007 - 2018 are shown.

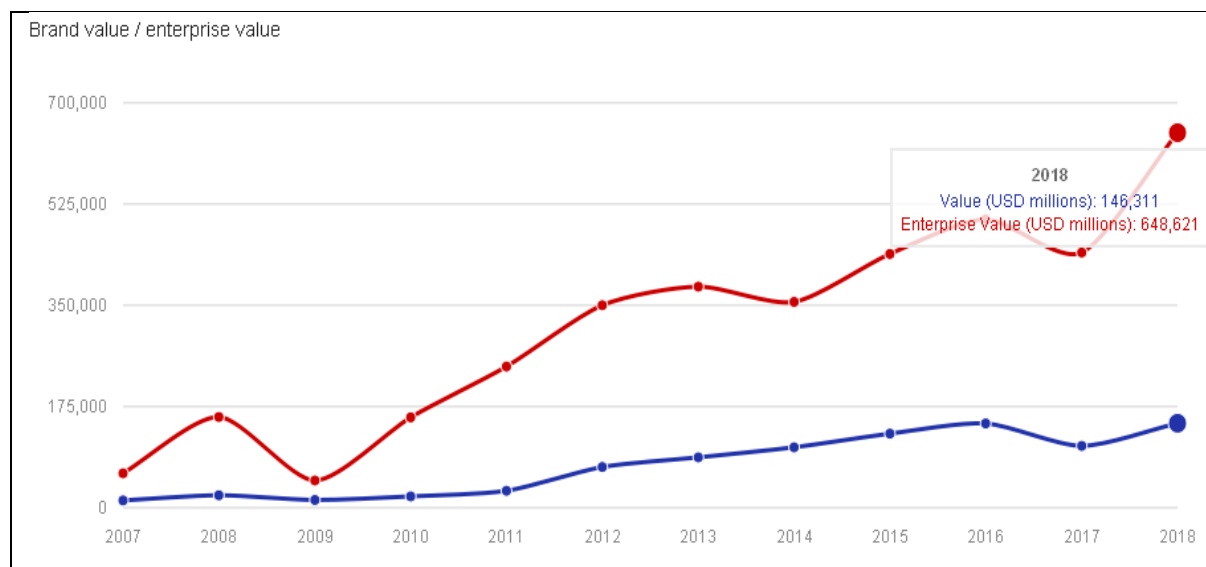


Figure 1. Dynamics of changes in time of total enterprise market value and the appraised brand value for Apple Inc. Source: Brand Finance, 2018, p. 1.

We will conduct a retrospective analysis. As it is recommended by [24, p. 753], analysts could obtain balance sheet amounts from prior years from earlier annual finance reports, when the firm provides sufficient information, which is enough for restate prior years' financial statements using reasonable

assumptions. In this case we use appraised value estimations, which are more reliable for evaluation purposes. These primary data are sufficient for the precise calculation of depreciation parameters and market multiple EV/BV. As we can see on fig. 1, during a retrospective period there were few periods of

enterprise and brand value decrease, on its increase general trend background. So, during short-time gap interval 2008 - 2009, 2013 - 2014 and 2016 - 2017 it is possible to mark the decline periods of enterprise and brand value. Thus, in the first and last of these short-time periods there were facts of both parameters synchronous value decline. Value time function transition from ascending to falling, and vice versa, means the sign change of this function first derivative. Value time function change direction on increase or a decline causes instability, which became a source of allegations about the enterprise cost overvalue, done on

the basis of the estimation executed in 2012 [25, p. 46]. Similar pessimistic prognoses were set forth at of EVA-analysis implementation, obtained in the same 2012 by analysts of EVA Dimensions LLC (in the field of financial data, valuation analytics, and investment management) and of Stern Stewart & Co. (in the field of financial and incentive consulting). EVA (Economic Value Added) is a firm's true economic profit after deducting the full opportunity cost of all invested capital, equity as well as debt. That forecasts envisaged the linear sales volumes decline and, accordingly, EVA Margin reducing (see fig. 2).

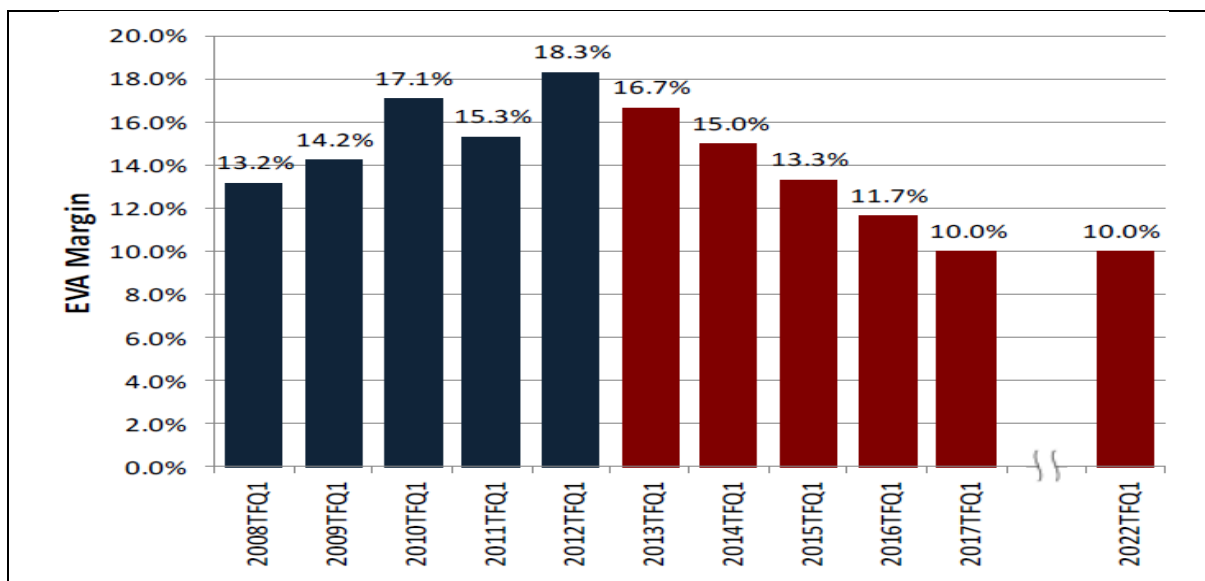


Figure 2. Forecasted in 2012 dynamics of Apple inc. EVA Margin changes in time.

Source: Sterling & Burkett, 2012, p. 14.

In obedience to the valuation, executed in accordance with the accepted suppositions, a statement was made in 2012 shows that EVA Margin of Apple inc. must go down from 18.3% in 2012 to 10.0% only in 2017 (-170 bps per year for next 5 years), to equate to the current market value. In the previous 5 years period, 2008 – 2012, EVA Margin has ranged from 13.2% to 18.3%, with a general tendency to the trend increase [26, p. 14]. The real factual data in relation to further economic development of Apple, are given above (see fig. 1), did not confirm these pessimistic prognoses until now. Therefore for a further analysis we will be based on factual data of Brand Finance, 2018, p. 1. For this purposes, first of all, the precise determination of used terms and concepts is need. BV index is obtained as the value of the trade mark and associated marketing intellectual property objects within the branded business. Brand Finance keeps to the requirements of internationally recognized standard on Brand Valuation – ISO 10668 “Brand valuation – Requirements for monetary brand valuation is a specification”. This standard was issued by the International Organization for Standardization (ISO) for the procedures and methods of monetary brand value measurement concretization. It was developed by ISO technical committee ISO/TC 289 and was published for the first time in September 2010. ISO 10668:2010 specifies a framework for brand valuation,

including objectives, bases of valuation, approaches to valuation, methods of valuation and sourcing of quality data and assumptions. It also specifies methods for reporting the results of such valuation.

In p. 2.2 it defines brand as a marketing-related intangible asset including, but not limited to, names, terms, signs, symbols, logos and designs, or a combination of these, intended to identify goods, services or entities, or a combination of these, creating distinctive images and associations in the minds of stakeholders, thereby generating economic benefits/values. In p. 2.3 it defines intangible asset as an identifiable non-financial asset with no physical substance. Let we notice that this standard makes difference between brand and trade mark. In p. 2.8 trade mark is defined as a legally protectable sign, or any combination of signs, capable of distinguishing the goods or services of on undertaking from those of other undertakings [27, p. 2].

Under the enterprise market value there is mentioned value of the entire enterprise, made up of multiple branded businesses. Where a company has a purely mono-branded architecture, the ‘enterprise value’ is the same as ‘branded business value’. Brand Finance always conducts a branded business valuation as part of any brand valuation, so brand should be viewed in the context of the business in which it operates. Analysts evaluate the full brand value chain,

in order to understand the links between marketing investment, brand-tracking data, and stakeholder behavior. Brand Finance use the Brand Contribution concept, which means that the overall uplift in shareholder value that the business derives from owning the brand rather than operating a generic brand. According to the authors of this research, they are estimate the brand values as those of the potentially transferable brand assets only, making 'brand contribution' a wider concept. An assessment of overall 'brand contribution' to a business provides additional insights to help optimize performance [23, p. 1].

Let's analyze closer the trends character of appraised brand value BV and total enterprise value EV time changes, are shown on fig. 1. As we can see on a fig. 1, both investigated indexes on long time gap interval 2007 - 2018 demonstrate the general tendency to the increase. From the trends diagram given above is evidently that both indexes have some temporal periods of value decline – which are a rather exception, than rule. As it is evidently from a fig. 1, during a retrospective period the synchronous value decline of both investigated indexes were observed only twice, namely - in 2008 - 2009 and 2016 - 2017. In these brief periods, by duration no more, as 1 year, diagram displays both enterprise and brand positive depreciation presence, id est value reduction in time. But a general tendency was a negative depreciation presence, which arose up as a result of monotonous increase of investigated indexes on long-time period interval – what is rather typical for this class intangible asset [20, p. 735].

The analysis of indexes change dynamics, prepared above, shows the very special character of some kinds of intangible assets value time changes trends. As we can see, in particular, brand and

enterprise goodwill displays a unique characteristic of positive and negative depreciation, id est market value reduction or increase, in separate periods during its economic life. Coming from it, it is possible to expound supposition, that the corresponding temporal declines of brand value were the result of advertising and information support influence factors. Value time changes and its depreciation characteristics showed indirect connection between appraised brand value and annual depreciation indexes.

Thus direction of changes of brand value, id est its reduction or increase in time, determines the sign of annual depreciation quantitative indexes. In general case, at the brand value increase on long-time period, annual depreciation indexes are negative; in separate short periods of brand value temporal decline, these indexes are positive. The last fact underlines only the general tendency of these intangible assets ability to the permanent increase of appraised value. As we suppose, it is possible mainly due to accumulation in this value investment cash flows for the brands advertising and information support. It is possible also to set forth a hypothesis about the presence of close cross-correlation connection between that cash flows and brand value, because indexes of brand and goodwill values are in clear synchronization in periods of reduction or increase.

It grounds quantitative determination principles of an offered market multiple "total enterprise market value/the appraised brand value". The numerical values of this multiple can be set by ratio calculation of given higher two investigated value indexes. On fig. 3 graphic interpretation of the got dependences is presented; the main statistical characteristics of values ranges, used to determinate the multiple "enterprise market value/the appraised brand value", are shown in Table 1.

Table 1

Values series ranges statistical characteristics of enterprise market value and appraised brand value

Indexes names	Measure unit	Symbol	Index numerical value
Series expected value estimation of enterprise market value	USD mln	$M(EV)$	315.139
Series expected value estimation of enterprise brand value	USD mln	$M(BV)$	73.989
Sample variance dispersion of enterprise value series	(USD mln) ²	$\sigma^2(EV)$	31,315.780
Sample variance dispersion of brand value series	(USD mln) ²	$\sigma^2(BV)$	2,550.222
Corrected sample variance dispersion of enterprise value series	(USD mln) ²	$\sigma_b^2(EV)$	34,162.669
Corrected sample variance dispersion of brand value series	(USD mln) ²	$\sigma_b^2(BV)$	2,782.060
Standard deviation of enterprise value series	USD mln	$\sigma(EV)$	184.831
Standard deviation of brand value series	USD mln	$\sigma(BV)$	52.745
Variation coefficient of enterprise value series	%	$k(EV)$	58.651
Variation coefficient of brand value series	%	$k(BV)$	71.288
Linear pair correlation coefficient of enterprise value and brand value series	-	$R(EV, BV)$	0.952
Determination coefficient of enterprise value and brand value series	-	$R^2(EV, BV)$	0.906

S o u r c e: table data are developed by the authors

Discussion. Let's analyze the obtained data of calculations. Obviously, that numerical value of multiple "total enterprise market value/the appraised brand value" depend on both indexes - appraised brand and total enterprise value. Interpretation of the got calculation results consists in the following. A type of chart in shown on fig. 3 grounds to expound supposition that link connection between the constituents of the investigated multiple is not

functional, but statistical, cross-correlation. The comparative analysis of primary data and obtained calculation results is executed higher, showed that dependence values dynamics of this multiple for the considered example demonstrated the presence of periods of its reduction or increase, but here is not observed unambiguous synchronization of these changes.

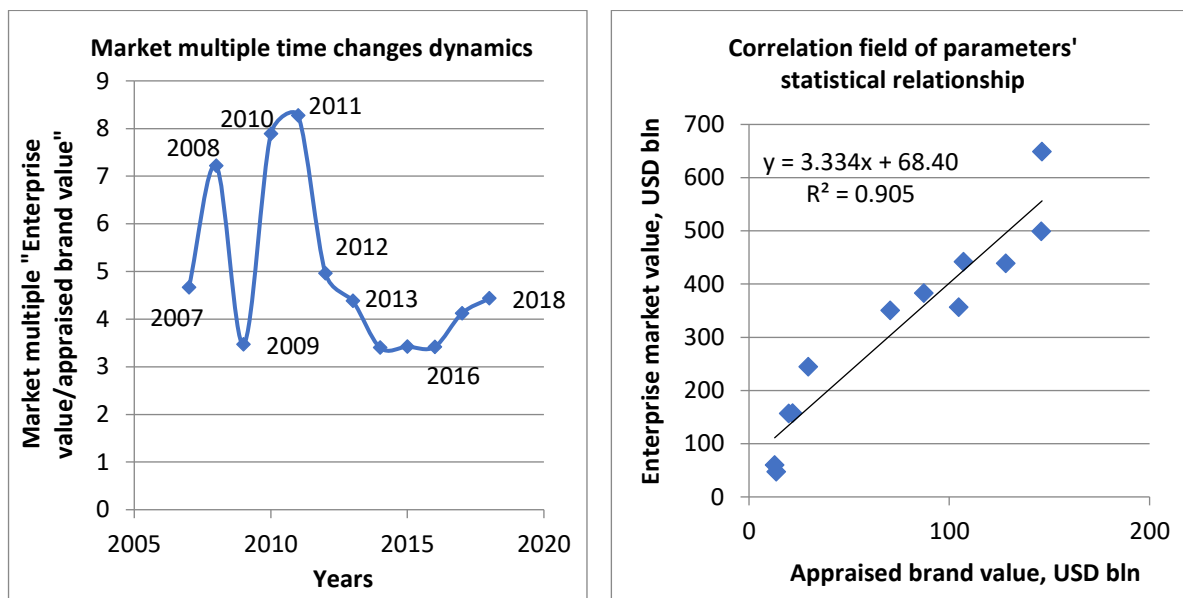


Figure 3. Dynamics of the "total enterprise market value/the appraised brand value" market multiple time changes (left) and correlation field for the researched parameters (right).

S o u r c e: diagrams are developed by the authors

Let's take a closer look at the ratio of total enterprise market value to the appraised brand value, which determinate researched multiple numerical values for a long-term gap. Chart of the dependence, given on a fig. 3, left, demonstrates a curve with the alternating first derivative, that is not suitable for its approximation by monotonous functional dependence, which would be certain analytically. It is possible also to establish next facts. The got values of multiple "enterprise market value/the appraised brand value" lie in a wide range 3.402...8.272. The lower limit of range behaves to data in 2014, overhead, accordingly - to 2011. It means that in separate periods during the retrospective period of 2007 - 2018 a total value of Apple Inc. Company was in 3.402...8.272 times higher from the value of its brand. It does not allow to assert that part of brand value is qualificatory in the total value of company - but it is impossible to deny, that it is fully substantial, as folds close 12% in 2011 and 29% in 2014 (round). The higher index numerical value of brand value series variation coefficient $k(BV) = 74.015\%$, in compare with the enterprise value series variation coefficient $k(EV) = 56.007\%$ only, proves that brand value fluctuation range on long time gap interval 2007 - 2018 demonstrate significantly higher variation.

The positive value of the correlation coefficient and slope of the regression line indicate a positive

correlation statistical relationship. A high value of the correlation coefficient $R = 0.952$ and determination factor of investigated parameters $R^2 = 0.905$ confirm that the statistical relationship between these value parameters is strong enough. According to table «Quantitative criteria for estimating the relationship density» [28, p. 103], the values obtained above of the correlation coefficient give grounds to characterize the degree of statistical relationship density as "very strong", since the value of $R = 0.952$ relates to the last interval of this table (0.9 - 0.99 in absolute value). The latter shows that it is very reasonable to use multiple "enterprise market value/the appraised brand value" as the primary data source for brand evaluation.

The relevance of these data in the Costs Approach/Compared Sales Approach combination applying is much higher, even when compared to widely used indicator "accumulated advertising expenses/the appraised brand value". This indicates their closer statistical relationship than analyzed earlier relationship between appraised brand value and the fixed part of accumulated total Selling, General and Administrative Expenses (SG&A) expenses, which are used as the main price-forming factor by Aswath Damodaran [29, p. 15].

For comparison below are shown data in relation to multiple "accumulated SG&A expenses/the

appraised brand value” and correlation field of its components (fig. 4). We based on SG&A expenses data, laid in open access by Ycharts.com, which is positioned as The Modern Financial Data Research Platform [30, 2019]. SG&A expense (short for Selling, General and Administrative expense) is a line item on the income statement, though sometimes sales and

marketing expenses are reported separately from general and administrative expenses. The details of how SG&A expenses are calculated vary widely from company to company, so YCharts recommends looking at the annual report (10-k) an investor is interested in dissecting this number further.

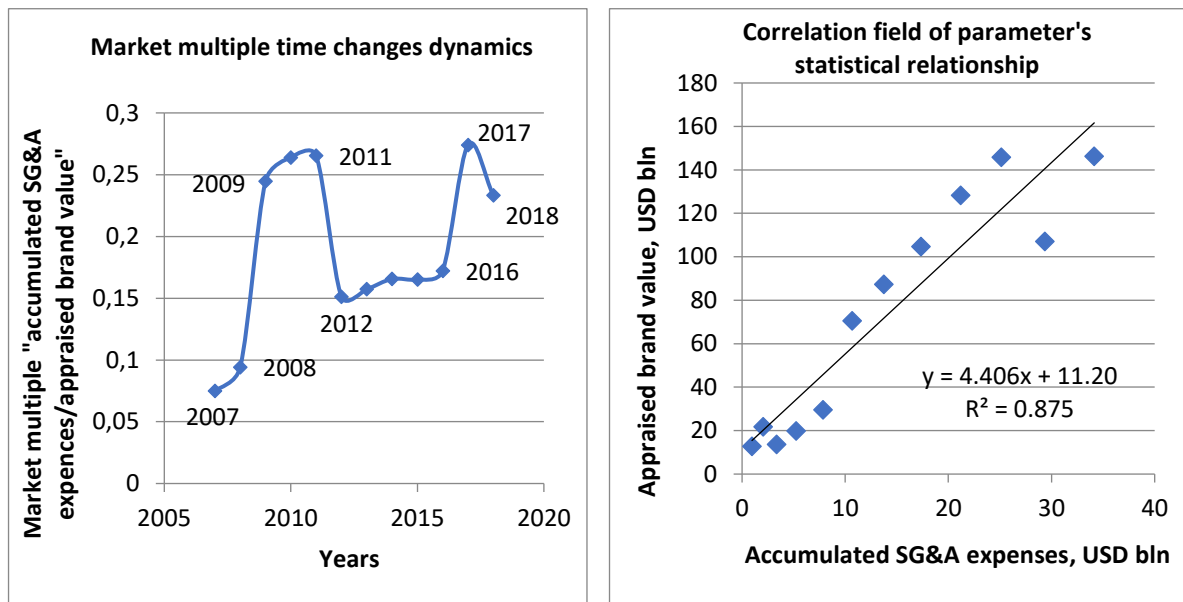


Figure 4. Dynamics of the “accumulated SG&A expenses/the appraised brand value” market multiple time changes (left) and correlation field for the researched parameters (right).

Source: diagrams are developed by the authors

As we can see on a fig. 4, left, market multiple “accumulated SG&A expenses/the appraised brand value” on the same long time gap interval 2007 - 2018 is described by a curve with the also alternating first derivative. The got values of that multiple lie in a range 0.075...0.274. The lower range limit behaves to data in 2007, overhead, accordingly - to 2017. It means that in separate periods during the retrospective period of 2007 - 2018 accumulated SG&A expenses of Apple Inc. was in 0.075...0.274 times lower from the value of its brand.

A value of the correlation coefficient $R = 0.936$ and determination factor of investigated parameters $R^2 = 0.875$ shows that the statistical relationship between these value parameters in this case is weaker, than for multiple “enterprise market value/the appraised brand value” ($R = 0.952$, $R^2 = 0.905$). The high positive value of the correlation coefficient, obtained in last case, give grounds to characterize the degree of statistical relationship density as highly suitable for evaluation purposes. The theoretical substantiation for this is the fact that advertising costs during the whole period of brand value economic life are accumulated in it, and directly affect either on the brand value, and on the goodwill value, embodied in this brand. We can not deny the presence of logically verified relationship between total enterprise value and brand/goodwill value, which are, undoubtedly, the components of first. This confirms the priority of using the indicator of total enterprise value for brand valuation purposes, and, with some reservations, otherwise.

Revealed fact of the higher index numerical value of brand value series variation coefficient, in compare with the enterprise value series variation coefficient, proves that brand value fluctuation range on long time gap is wider. This means that brand value is more susceptible to change parameter, dynamics of which is determined by rapidly variable price-forming factors. By contrast, enterprise value is more stable, because it depends on many parameters with very different dynamic characteristics. Indeed, the brand, like other intangible assets with sign-changeable annual depreciation indicators, is characterized by its value high sensitivity to factors of internal and external information influence. The most important of these factors is the systematic advertising and information support activity, carrying out by owner.

All expenses on enterprise’ trademark and goodwill development, which are mutually related intangible assets, are accumulated on it, permanently increasing their value. At economically successful enterprise, a situation when high level cash flows are regularly invested into the brand development is quite typical. Then the natural consequence of this is a rapid brand/goodwill value increase. It is possible, mainly, due to owner’s activities of its information and advertising support. We consider it as internal information influence price-forming factor, which provides negative annual brand depreciation. The opposite case is also possible, for example - a sharp trademark value decrease, as a result of external information factors influence. That is possible in the

case of disclosing the facts of consumer fraud and discredit campaigns in media. In such case, there may be possible great brand/goodwill value decrease, with its falling to zero and even negative numerical indexes. This is considered as external information influence price-forming factor, which provides positive annual brand depreciation. In the first case there are manifestations of a negative moral, or functional, depreciation/obsolescence, and in the second case - respectively, evidence of positive economic, or external depreciation. In the typical case, systematic internal information support impact on the brand's value usually results in its value increase and a negative functional depreciation/obsolescence. In the case of external information influence on these assets value the sign of external depreciation may be either positive or negative. After all, as shown above, these intangible assets value changes in the influence of external price-forming factors can be directed not only towards reducing their value, but also in the direction of its increase. The first case occurs when publishing information reveals facts that compromises the brand owner company. The second case is observed when the enterprise is occupying a high position in various ratings, receiving prestigious awards, disclosing in media facts of financial support for socially-oriented initiatives or charitable activities [20, p. 725].

So, this multiple can be recommended for the use in the current independent valuation practice, and it seems to be an effective instrument for improving the valuation work quality [31, p. 54]. It makes possible valuation results uncertainty degree reduction and provide higher accuracy level of the results that will be obtained when such an evaluation is performing.

10. Conclusions/recommendations. The results of multiple "enterprise market value/the appraised brand value" determination, are got higher for one of the most expensive brands of the world, Apple Inc. company, showed high enough variation level of multiple values during the investigational retrospective period. It is objective confirmation of this multiple high sensitiveness to both initial parameters, used for his calculation. From the considered example we can formulate a conclusion about difficulty to use of this multiple as an independent evaluation instrument on a long-time gap interval, taking into account the unforecast changes character of both initial parameters and values of multiple, and troubles with approximation of his dependence in time by monotonous function, that would be easily certain analytically.

But on a short-time gap interval, when multiple value changes are insignificant (for example, period 2014 – 2016 in fig. 2, left), or they are close enough to linear function (for example, periods 2011 – 2014 and 2016 – 2018 in fig. 2, left), such a use of the offered multiple seems to be quite possible. Also in the other brands examples, for that the changes of initial parameters are described with monotonous character function, the use of the offered multiple is possible and may be highly recommended. Such an examples are not rare - brands of Google and Facebook during a

retrospective period 2012 - 2018 interval did not reveal even short-time decline of value in general, demonstrating a stable negative annual and accumulated depreciation and positive first derivative sign of brand value time changing function.

For such examples with monotonous character trends seemed to be fully possible previous trends forecasting, based on multiple "enterprise market value/the appraised brand value" numerical value approximation by monotonous functions, which can be analytically certain by simple formulas. By such extrapolation method of the set functional dependences becomes possible more reliable prognostication of multiple indexes on closer future periods. In any case, quantitative determination of "enterprise market value/the appraised brand value" multiple is undoubtedly useful - in particular, from the point of view of brand value part in the company total value exposure possibility, as a reciprocal numerical value of researched multiple. It gives an opportunity to increase informing value of economic indicators analysis results during a retrospective period.

It is set that there is close high-density statistical relationship between the appraised trademark value indexes and enterprise market value. At brand appraising/valuation procedure is not recommended to apply any accounting book-keeping amortization indexes, as they are not the reliable indicator of factual depreciation/obsolescence. It is deduced that for these types of the intangible assets researched depreciation/obsolescence mainly depends on their advertizing and information support and associated cash flows expenses, invested by owner in its development. It is set that during the period of enterprise and brand existence a multiple change of depreciation/obsolescence sign on the separate time periods is possible. For brand it depends on sufficient informative and advertisement support implementation, that's why these price-forming factors must be taken into account at market value and depreciation/obsolescence determination procedure. In this connection it is possible to assert that brand value is very sensitive to these parameters change, which are considered as rapidly variable price-forming factors with high dynamics indexes. For enterprise value the list of price-forming factors includes a lot of parameters with very different dynamic characteristics, whereby enterprise value is more stable, but highly related to the brand value. It is well-proven that both brand value and enterprise value in general case of normal profitable enterprise activity must be determined by application of increasing market value model with negative depreciation/obsolescence.

Considerable interest presents further researches realization in the direction founded in this and previous articles, in particular - verification of hypotheses about the presence of cross-correlation relationship between brands appraised market value indexes and its errors. It would give an opportunity to lay information theory grounded foundations for further methodological base improvement perfection of the independent expert evaluation.

References:

1. Farhutdinov, I.Z. & Trapeznikov, V. A. (2006). Investicionnoe pravo [Investment law]. Moscow: "Volters Kluver". [in Russian].
2. Sokolov, Ja.V & Pjatov M.P. (1997). Gudvill: «novaja» kategorija buhgalterskogo ucheta [Goodwill: a "new" category of accounting record-keeping]. Buhgalterskij uchet [Accounting record-keeping], 2, 46. [in Russian].
3. Gejec', V. M. (2006). Ukrai'na u vymiri ekonomiky znan' [Ukraine in economy of knowledge measuring]. Kyiv: Osnova, 592 p. [in Ukrainian].
4. Ridzevska, O.V. & Salo, A.V. (2012). Ponyattya gudvilu ta charakteristika yogo skladovyh [Concept of Goodwill and it's constituents description]. Naukovi pratsi Kirovogradskogo natsionalnogo tehnicnogo universitetu. Ekonomichni nauky. [Scientific works of the Kirovohrad national technical university. Economic sciences]. 22, part II, 349-352. [in Ukrainian].
5. Suk, L., Suk, P. (2011). Oblik nematerial'nyh aktiviv. [Intangible Assets accounting]. Buhgalterija v sil'skomu gospodarstvi, 15-16, 45. [in Ukrainian].
6. Samsonov V. & Harchenko S. (2004). Otsenka delovoy reputatsii, kak nematerialnogo aktiva kompanii [Goodwill valuation as company's intangible asset]. Finansovyyi direktor [Financial director]. 2, 24. [in Russian].
7. Jasyshena, V. V. & Poslavs'ka L. I. (2017). Torgovel'na marka: oblikovyj, pravovyj i marketyngovyj aspekty [Trademark: registration, legal and marketing aspects]. Efektyvna ekonomika [Effective economy]. 3, 44. [in Ukrainian].
8. Fernandez P. (2001). Valuation using multiples. How do analysts reach their conclusions? Social Science Research Network (SSRN) Working Paper, 2001.
9. Lie E. & Lie H. (2002). Multiples Used to Estimate Corporate Value. Financial Analysts Journal, 58, 2, 44-54.
10. Liu J., Nissim D., Thomas J. (2002). Equity Valuation Using Multiples. Journal of Accounting Research. 40, 1, 135-172.
11. Gleason, Cristi A., Johnson, W. Bruce, & Li Haidan. (2008). Valuation Model Use and the Price Target Performance of Sell-Side Equity Analysts. Retrieved from <http://assets.csom.umn.edu/assets/142098.pdf>.
12. Asquith, P., M. Mikhail and A. Au. 2005. Information content of equity analyst reports. Journal of Financial Economics, 75, 245-282.
13. Prusak, B. (2017). The accuracy of alternative stock valuation methods – the case of the Warsaw Stock Exchange. Ekonomiska Istraživanja [Economic Research], 30:1, 416-438, DOI: 10.1080/1331677X.2017.1305793. Retrieved from <https://hrcak.srce.hr/file/266563>
14. Fernandez, P. (2004). Company Valuation Methods. The most common errors in Valuations. IESE Business School. University of Navarra. Working paper WP no. 449. Retrieved from <https://notendur.hi.is/ajonsson/kennsla2006/Valuation.pdf>
15. Plahotnik, O.O. (2018). Konceptual'ni osnovy vartisnoi' ocinky majna pidprijemstv [Conceptual bases of enterprises property evaluation]. Ekonomichnyj analiz [Economic analysis]. 2018. Vol. 28. Issue 4, pp. 235-244. [in Ukrainian].
16. Ermolenko K. Ju. (2006). Ocenka fundamental'noj stoimosti kompanij na osnove metoda rynochnyh mul'tiplikatorov v sochetanii s proceduroj randomizacii [Fundamental cost of companies evaluation on the basis of market multiples method in combination with randomization procedure] Retrieved from https://gsom.spbu.ru/files/upload/niim/news/2006/13112006_Ermolenko.pdf [in Russian].
17. Valdajcev S.V. (1997). Ocenka biznesa i innovacii [Business and innovation evaluation]. Moscow: Informacionno-izdatel'skij dom "Filin" [Informatively-publishing house "Filin"]. [in Russian].
18. Ivanov N.I. (2014). Ocenka stoimosti biznesa [Business evaluation]. Murmansk: Murmanskaja akademija jekonomiki i upravlenija [Murmansk academy of economy and management]. [in Russian].
19. Pozdnjakov, Ju.V., Lapishko, M.L. (2019). Vplyv dynamiky zminy vartosti brenda na pokaznyky jogo znosu [Brand name value dynamic time changes influence on it's depreciation indexes]. Infrastruktura rynku [Market Infrastructure], 28, 393 - 401. Retrieved from <http://www.market-infr.od.ua/uk/28-2019>. [in Ukrainian].
20. Pozdnjakov, Ju. V., Lapishko, M. L. (2018). Vplyv vydiv znosu tovarnogo znaka na zminu jogo vartosti v chasi [Trademark depreciation types influence on it's value time changes model choice]. Shidna Jevropa: ekonomika, biznes ta upravlinnja [Eastern Europe: economy, business and management]. 6 (17), 728 – 735. Retrieved from <http://www.easterneurope-ebm.in.ua/17-2018-ukr>. [in Ukrainian].
21. Pozdnjakov, Ju.V., Sadovenko, Ju.P. (2018). Quantitative estimation of intellectual property objects evaluation accuracy. Ekonomika ta suspil'stvo [Economy and society]. 19, 216. [in Ukrainian].
22. Pozdnjakov, Ju.V., Lapishko, M.L. (2018b). Uzgodzhennja kolizii' normatyvnyh vymog do vyznachennja vartosti tovarnogo znaka [Concordance possibilities of normative bases collision for trademark cost determination]. Ekonomichnyj analiz [Economic analysis]. 28, 4, 43 - 49. [in Ukrainian].
23. Brand Finance Latest releases. (2018). Global 500. 2018. The annual report on the world's most valuable brands. Retrieved from <https://brandfinance.com/knowledge-centre/reports/brand-finance-global-500-2018/>
24. Wahlen, James M., Baginski, Stephen P., Bradshaw, Mark (2015). Financial Reporting, Financial Statement Analysis and Valuation: A Strategic Perspective. 8th edition. Boston, MA : Cengage Learning.
25. Fursova V.A., Mizik O.V. (2012). Investicionnyj analiz Apple inc. Razrabotano Fivex

Analytics Group dla kompanii Onlajn-kapital. [Investment analysis of Apple inc. Worked out by Fivex Analytics Group for On-line-capital company]. Retrieved from www.onlinecapital.kiev.ua/research/download.php?id=2&ga=1. [in Russian].

26. Sterling, Craig & Burkett, Austin. (2012). EvaDimensions Analysis of Amazon, eBay, Apple, and Google The Path to Financial Truth. Retrieved from evadimensions.com/.../evaDimensions%20Analysis%20of%20AAPL%20AMZN%20EBAY

27. International standard ISO 10668. (2010). Brand valuation. Requirements for monetary brand valuation First edition. Retrieved from <http://farsi.tpo.ir/uploads/iso%5B1%5D.pdf>.

28. Sivec, S.A. (2001). Statisticheskie metody v ocenke nedvizhimosti i biznesa. [Statistical methods in

the real estate and business evaluation]. Zaporozh'e. [in Russian].

29. Aswath Damodaran. (2009). Valuing Companies with intangible assets. Retrieved from <http://pages.stern.nyu.edu/~adamodar/>.

30. Ycharts.com (2019). Apple Inc Historical SG&A Expense (Quarterly) Data Definition Retrieved from https://ycharts.com/companies/AAPL/sga_expense

31. Markus, Ja.I., Pozdnjakov, Ju.V., Maksymov, S.J., Shalajev, V.M., Bulgakova, S.A., Zajceva, V.G., Nef'odov, O.V., Markus, V.V., Chashchyn, Ju.G., Malysheva, K.O. (2018). Kontrol' jakosti robit z ocinky majna (recenzuvannja, ekspertyza). [Control of property evaluation works quality (criticizing, examination)]. Praktyka ocinky majna [Practice of property evaluation], 3, 54. [in Ukrainian].

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ДОСЛІДЖЕННЯ ОСОБЛИВОСТЕЙ СУЧАСНОГО ІННОВАЦІЙНОГО РОЗВИТКУ ПІДПРИЄМСТВ В УМОВАХ ІНКЛЮЗИВНОГО РОСТУ ЕКОНОМІКИ: ІНОЗЕМНИЙ ДОСВІД

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RESEARCH FEATURES OF ENTERPRISES MODERN INNOVATIVE DEVELOPMENT IN THE CONDITIONS OF INCLUSIVE ECONOMIC GROWTH: FOREIGN EXPERIENCE

Annotation. The article deals with the research features of enterprises modern innovative development in the conditions of inclusive economic growth. The foreign experience of enterprises innovative development is emphasized. The concept definition of “enterprises innovative development” is developed. The models of innovative development that are specific for the countries of different development level are highlighted. The essence of: the Euro-Atlantic model, the East Asian model, the alternative model, and the model of «triple spiral» are discovered. In the process of research implementation it is defined, that each of the considered models of innovative development has its own advantages which are realized at operating conditions of one or another country.

Key words: innovative development, inclusive growth, economy, foreign experience, models of innovative development.

The problem statement. Due to strengthening of globalization and competitiveness level in the world, formation of the methodological and methodical principles of countries' CAE increase today acquires the special actuality of features research of enterprises modern innovative development in the conditions of inclusive economic growth: foreign experience. Unfortunately, at present Ukrainian economy does not fit the context of modern scientifically technological and innovative development strategies of European socio-economic space.

Innovativeness is a determining feature of modern scientific and technical, entrepreneurial, socio-economic and all public processes. Ukraine's fate depends on the acquirement of innovative development mechanisms: whether it will

move in the direction of including to the number of the developed countries, whether it will remain a stagnant country on the roadside of scientific and technical and social progress. It is concerned with general principles of social development, in keeping with them there is a transition from mainly reproductive to the innovative type of development in the world. Innovativeness – it not only a key to a dynamic development, welfare, personal success, but also a means of a country's sovereignty, its competitiveness in the super complicated modern world. In the last decades the problem of innovative policy formation and realization increasingly come into the notice not only among scientists but also business leaders and political figures. Innovations influence the socio-economic development can result in radical structural changes in economy and