# NON-LINEARITY OF AUDIT PRICES AND REPUTATION IN DEVELOPING COUNTRIES: SHIFT TO OR FROM?

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Abstract. The *purpose* of the paper is to analyse the origins of audit prices non-linearity in developing countries. We assume risk- and industry-sensitiveness of audit firms there due to the low institutional capacity, weak market forces development and questionable both auditors and clients ethical behaviour affecting market sustainability and implying additional challenges on stakeholder confidence. Methodology. We combine economic geography approach and reputation-averse phenomenon to explain endogenous volatility of average audit prices in Ukraine for the period of 2008-2015. Analysis of recent publications partially explains audit pricing non-linearity determinants that have both qualitative (brand and specialization) and quantitative (risks, manipulations, bribery) nature in developing countries. First, we qualify determinants of audit fees by inherent origin (endogenous, exogenous), stakeholder side (demand, supply), and market structure (concentrated, fragmented). Second, we summarize reputation challenges of audit business in developing countries. Third, we run empirical analysis of average prices in Ukraine for the period of 2008-2015 based on annual Chamber of Auditors of Ukraine reports data. Practical implications. Audit pricing models in developed countries are mainly exogenous and based on the auditor's risk assessment. Vulnerability of markets and clients' unethical behaviour makes audit pricing models more endogenous in developing countries. Value/originality. This is the first paper providing a better understanding of audit prices declination in Ukraine as a consequence of dysfunctional audit firms' behaviour, institutional and market fragility, inherent to developing countries.

Key words: audit pricing, risks, developing countries, reputation, fee premium.

JEL Classification: M41, M42

#### 1. Introduction

Audit fees, traditionally, are among regularly discussed issues between the regulators, businesses and professional society. Audit pricing remains very important also for researchers in general (Barkess & Simnett, 1994, Beatty, 1989) discussions on determinants (Ward, Elder & Kattelus, 1994) and basic models (Giroux & McLelland, 2008, Pong & Whittington, 1994, Raluca, 2011). Traditionally, main arguments in pricing debates favour such factors as size (Carson & Fargher, 2007, Sundgren & Tobias Svanström, 2013), industry (Ballas & Fafaliou, 2008), and risk (Bell, Dooger & Solomon, 2008, Jubb, Houghton & Butterworth, 1996).

Our recent findings in this area suggest that pricing models shift from endogenous to exogenous factors, what can be explained by growing pressure of main stakeholders – clients and regulators through their control of the ethical, quality, social and public governance issues (Shulha, 2016). They are supported

by other findings for developed countries (Francis & Wang, 2005, Willenborg, 1999).

Instead, lower institutional capacity, weaker market forces development and questionable behavioural issues in developing countries pose additional challenges for local audit markets (Petrakov, 2013, Shulha & Petrakov, 2015, Schatzberg, 1990).

Unquestionably, quality of audit services should be regarded as a keystone of any report (Sundgren & Svanström, 2013) but such statement sounds uneven for developing countries (Korotkiy & Petrakov, 2009). Audit fee premiums are traditionally correlated with reputation (Carson & Fargher, 2007, Chaney & Philipich 2002, Kreps & Wilson, 1982, Moizer, 1997, Francis, Reichelt & Wang, 2005, Shapiro, 1983) and auditor independence (Barkess & Simnett, 1994,) which in developing countries are under pressure due to corruption, unethical behaviour and limited client's payability. Although there are some evidences

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on an impact of perceptions (Figueroa, 2013) and dysfunctional behaviour (Immordino & Pagano, 2012, Yuen, Law, Lu & Guan, 2013) on auditing pricing.

We think that audit pricing non-linearity in developing countries origins from weaker markets' sustainability and stakeholders' distrust. In case of Ukraine this hypothesis can be analysed through average audit prices during the last decade.

In order to check this idea we will combine economic geography approach (El Ghoul, Guedhami, Ni, Pittman & Saadi, 2013, El Ghoul, Guedhami & Pittman, 2014) and reputation-averse phenomenon (Choi, Kim, Liu & Simunic 2008), to explain endogenous volatility of average audit prices in Ukraine during 2008-2015.

First, we qualify determinants of audit fees by inherent origin (endogenous, exogenous), stakeholder side (demand, supply), and market structure (concentrated, fragmented). Second, we summarize reputation challenges in developing countries. Third, we run empirical analysis of average prices in Ukraine during 2008-2015 based on Chamber of Auditors of Ukraine annual reports.

# 2. Determinants of audit pricing in developing countries

Analysis of recent publications partially explains the determinants of audit prices non-linearity arising both from qualitative (brand and specialization) and quantitative (risks, manipulations, bribery) issues in developing countries. Client's payability (to cover highquality audit) and auditor's reputation (as independent and experienced entity) are particularly important for market stability: financially constrained clients may pose additional pressure on an auditor to limit the number of substantive procedures (affecting sufficiency of gathered information) while an auditor with "low balling" reputation may potentially curb financial statements' signals to investors and other stakeholders.

#### Table 1

Determinants of audit pricing in developing countries
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Non-linearity of audit fees in developing countries can be explained with asymmetric distribution of competent auditors within active entities - they are often attracted with Big4 or second-tier companies that are present at contestable markets widening the price gap between low-balling and premium-consistent contracts. As unhealthy competition strives market participants, general economic conditions play an important role in sustaining its capacity to generate high-quality services. In stagnant economy depressed market obviously narrows an auditor's ability to use the scale effect in pricing. Thus, by the criteria of inherent origin fee determinants are shifted from endogenous to exogenous (see table 1). The same we can state concerning prevailing demand-side as seen in market side analysis of the determinants.

# 3. Reputation challenges in developing countries

Challenges for audit entities and engagements in ethical area in developing countries originate from several sources:

1) low quality of basic accountancy and auditing education of team assistants and staff as a consequence of weak ties between auditors and universities;

2) "brain-drain" of young professionals, trained within Big4 in developing countries, to advanced economies; thus leaving "homeland" with "second-best" supply-side options;

3) slow and lagging transition to the International Audit Standards and Code of Ethics, imposing institutional laggings and phenomenon of dysfunctional behaviour of auditors.

Besides traditional challenges there could be mentioned force-majeure issues such as international conflicts, unfear sectorial competition (aggressive M&As), political crises (affecting FDI inflows and free trade conditions). All above-mentioned factors affect audit market in long-term perspective and its lagged

Determinants of audit pricing in developing countries														
	Туре	Auditor size	Client size	Industry specialization	Auditor switching	Efficiency of auditor staff	Short-term debt, financially-stressed	NAS provision	Earnings manipulation risks	Corporate Governance Risks, Internal Control	Assets & Sales, their structure	Type of audit	Brand selectivity	IFRS adjustment, Tax share
Inherent origin	Endogenous	+				+		+				+		
	Exogenous		+	+	+		+		+	+	+		+	+
Market structure	Concentrated	+	+			+					+		+	
	Fragmented			+	+		+	+	n/a	n/a		+		n/a
Market side	Demand		+		+		+	+	+	+	+	+	+	+
	Supply	+		+		+								

Notes: \* - not applicable.

Source: the authors' compilations.

recovery. Thus, regulatory position and impact can either support professionals or create additional barriers to auditors.

Empirical analysis of average prices in Ukraine during 2008-2015 based on Chamber of Auditors of Ukraine annual reports (see Pic. 1 and Pic. 2) provides us with some important data:

1) average fee per contract in UAH demonstrates strong increase within the time framework from 15,27 thousands hryvnias to 49,4 thousands hryvnias for one contract. At the same time total amount of deals declined almost by the half. We could suggest that such non-linear dynamics may result from industry concentration and increase of unit costs or complexity of a subject company. Though average fee per contract in USD remained constant what means prices were inelastic (not market determinants driven);

2) USD-based fees per contract peak in 2013 and further decline by 30% in 2015 demonstrated negative market trend for industry marginalization under challenging country conditions and mass bankruptcies in corporate and banking sectors during 2014-15 making it less attractive to foreign industry professionals and investors.



Pic. 1. Average audit fees (UAH, USD based on current prices) in Ukraine, 2008-2015



Pic. 2. Dynamics of Ukrainian audit market average fee

### 4. Conclusions

Practical implications. Audit pricing models in developed countries are mainly exogenous and based on an auditor's risk assessment. Vulnerability of markets and clients' unethical behaviour makes audit pricing models more endogenous in developing countries. Value/originality. This is the first paper providing a better understanding of audit prices declination in Ukraine as a consequence of dysfunctional audit firms' behaviour, institutional and market fragility, inherent to developing countries.

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## Светлана ШУЛЬГА, Ярослав ПЕТРАКОВ

НЕЛИНЕЙНОСТЬ ЦЕН НА АУДИТ И РЕПУТАЦИИ В РАЗВИВАЮЩИХСЯ СТРАНАХ: ДВИЖЕНИЕ К ИЛИ ОТ?

Аннотация. Целью работы является анализ источников нелинейности цен на аудиторские услуги в развивающихся странах. Мы предполагаем, что аудиторские фирмы чувствительны к рискам и отраслевой принадлежности (нелинейно) ввиду низкой институциональной способности, слабости рыночных сил и сомнительного поведения со стороны как аудиторов, так и клиентов. Это значительно ухудшает устойчивость рынков и порождает дополнительные вызовы для доверия их основных участников. Методика. Мы соединили экономическую географию с феноменом обратной репутации для объяснения эндогенной волатильности средних цен на аудиторские услуги в Украине в 2008-2015 годах. Анализ недавних публикаций частично поясняет детерминанты нелинейности ценообразования, возникающие под воздействием как качественных (бренд и специализация), так и количественных (риски, манипуляции, мошенничество) факторов в развивающихся странах. Во-первых, мы квалифицируем факторы, влияющие на аудиторский гонорар по критериям первичного происхождения (эндогенные, экзогенные), групп заинтересованных лиц (стороны спроса и предложения), структуры рынка (центрированный, фрагментированный). Во-вторых, мы обобщаем репутационные вызовы аудитов в развивающихся странах. В-третьих, мы проводим эмпирический анализ среднего размера гонорара аудиторов в Украине в 2008-2015 годах на основе ежегодных отчетов Аудиторской палаты Украины. Результаты. Практическое значение исследования заключается в том, что модели ценообразования в развитых странах преимущественно экзогенны и базируются на оценке рисков аудитором. Уязвимость рынков и неэтическое поведение клиентов в развивающихся странах делает модели ценообразования в аудите более эндогенными. Значение/оригинальность. Данная публикация впервые объясняет причину снижения средних цен сравнительных цен на аудиторские услуги в Украине как следствие дисфункционального поведения аудиторских фирм, а также институциональной и рыночной слабостей, присущих развивающимся странам.