



## LITERATURE ON THE VALUE ADDED INTELLECTUAL CAPITAL

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## ABSTRACT

**Purpose-** The purpose of this study is to classify academically important studies related to the Pulic's (1998; 2004) "value added intellectual capital (VAIC)" which is one of the model that attracts the interest of academics studying intellectual capital; and hence, to especially contribute to the Turkish literature and help future researchers.

**Methodology-** In our literature review study, studies available with the topic of "VAIC" or "value added intellectual capital" in the Web of Science database over the period of 2015 and 2020 and that which are categorised as "Business", "Economics" and "Business Finance" are analysed.

**Findings-** This literature review reveals that more than 65% of the studies were found to be published in 2018 and after, so it has been a subject of great interest in the academic world in recent years. As a result of our literature study, it was concluded that the effect of intellectual capital on financial performance is the most investigated topic. To measure this effect it has seen that; generally the panel data regression method is used. In all 37 studies included in the analysis, VAIC or any subcomponent was found to be statistically significant and positively associated with ROA. However, only 5 studies found that VAIC or any subcomponent was statistically significant and negatively associated with ROA. In these studies addressing accounting and finance literature; while VAIC (Pulic, 1998; 2004) is modifying; innovation expenditures, advertising expenditures and social welfare expenditures are taken into account.

**Conclusion-** Based on the analysis findings, it can be concluded that intellectual capital investments have become increasingly important for companies in recent years, regardless of the sector. According to the results obtained, it has been determined that VAIC and its subcomponents increase financial performance in most of the studies, regardless of country or sector. In addition, studies conducted in recent years shows that investments made in innovation capital such as "R&D expenditures" or in relational capital such as "advertising and marketing expenditures" are also intellectual capital investments and they can provide competitive advantage to companies.

**Keywords:** Intellectual capital, value added intellectual capital, financial performance, innovation capital, relational capital

**JEL Codes:** O 34, E 22, L 25

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## ENTELEKTÜEL KATMA DEĞER KATSAYISI ÜZERİNE ULUSLARARASI YAYINLAR

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### ÖZET

**Amaç-** Bu çalışmanın amacı entelektüel sermaye üzerine çalışan akademisyenlerin son yıllarda en çok ilgilendikleri modellerden biri olan Pulic'in (1998; 2004) "entelektüel katma değer katsayısi (VAIC)" ile ilgili önemli akademik çalışmaları sınıflandırarak özellikle Türkçe literatürü katkı sağlamak ve gelecekteki araştırmacıların fikir sahibi olmasına katkıda bulunmaktr.

**Yöntem-** Literatür taramamızda, Web of Science veri tabanında bulunan, 2015-2020 yılları arasında yayınlanmış, konusunda "VAIC" ya da "value added intellectual capital" geçen ve araştırma alanı "Business", "Economics" ve "Business Finance" olarak belirtilmiş makalelere ilişkin genel özellikler, modeller ve değişkenler iddelenmiş ve sınıflanmıştır.

**Bulgular-** Bu literatür taraması çalışmasında analiz konusu çalışmaların %65'den fazlasının 2018 ve sonrasında yayımlanlığı tespit edildiğinden, son yıllarda akademik dünyada oldukça ilgi gösteren bir konu olduğunu ortaya koymaktadır. Literatür çalışmamız sonucunda, entelektüel sermayenin daha çok finansal performans üzerindeki etkisinin araştırıldığı ve bu etkiye ölçmede ise genellikle panel veri regresyon yöntemi kullanıldığı sonucuna ulaşılmıştır. Analize dahil edilen 37 çalışmanın tamamında VAIC ya da herhangi bir bileşenin ROA ile istatistikî olarak anlamlı ve pozitif ilişkili olduğu tespit edilmiştir. Ancak, yalnızca 5 çalışmada VAIC ya da herhangi bir bileşenin ROA ile istatistikî olarak anlamlı ve negatif ilişkili olduğu tespit edilmiştir. Muhasebe ve finans literatürüne ele alan bu çalışmalarda; VAIC (Pulic, 1998; 2004) modifiye edilirken inovasyon harcamalarının, reklam harcamalarının ve sosyal refah harcamalarının dikkate alındığı tespit edilmiştir.

**Sonuç-** Analiz bulgularına dayanarak son yıllarda entelektüel sermaye yatırımlarının şirketler için, sektör ayırt etmeksizin, giderek artan bir önem kazandığı sonucuna varılabilir. Elde edilen sonuçlara göre, VAIC ve bileşenlerinin ülke ya da sektör ayırt etmeksizin çalışmaların büyük çoğunluğunda finansal performansı artırdığı tespit edilmiştir. Ayrıca son yıllarda yapılan çalışmalar; "AR&GE harcamaları" gibi inovasyon sermayesine yapılan ya da "reklam ve pazarlama harcamaları" gibi ilişkisel sermayeye yapılan yatırımların da entelektüel sermaye yatırımı olduğunu ve firmalara rekabet avantajı sağlayabildiklerini ortaya koymaktadır.

**Keywords:** Entelektüel sermaye, entelektüel katma değer katsayısı, finansal performans, inovasyon sermayesi, ilişkisel sermaye

**JEL Codes:** O 34, E 22, L 25

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