

**CITY UNIVERSITY OF HONG KONG**  
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**Tobin Q's Dilemma: A New Concept O Ratio for New  
Economy Company Valuation VS Tobin's Q**

**托賓 Q 的兩難：對新經濟公司估值的  
O 比率新概念與托賓 Q 的對比**

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## Abstract

Tobin's general equilibrium theory, especially the Q ratio, provides an anchor for valuing investment. The Tobin approach started from evaluating tangible assets a few decades ago and formed the Q equation built on the concept of replacement cost. The Q ratio works in the ideal capital market. However, with the rapid rise of the new economy which creates value depending on large intangible assets that are not included in the balance sheets, the Q ratio has become inadequate as a proxy for valuation. This thesis looks beyond tangible assets as defined in the Q ratio, and creates a new concept – the “O” ratio to address the role of irreplaceable intangible assets in the functioning of capital market valuation, which is not necessarily captured in companies’ balance sheets. Intangible assets of the new economy hi-tech companies, such as their IPs, goodwill, unique technologies, constitute the main source of their value. Based on the findings, when we try to identify investment targets or ultimate winners in high-tech companies, we should not be limited to assessing their tangible assets but should evaluate the potential of their “intangibles”, which have formed the basis of their moat. This thesis details this finding that supplements Tobin's idea from the perspectives of deductive and inductive analysis. This paper uses the O ratio to measure intangible assets, and concludes that Market maker’s average Q creates a new economy winner’s O which helps investors find the right direction to increase their capital investment and make marginal Q lost its equilibrium capacity so that market trend gets Mathew effect. They can analyze the characteristics of the “winner” and the impact of intangible asset growth on investment effectiveness. While free cash flow remains at the heart of valuation,

reclassifying assets and relooking at whether equity comes from non-exclusive intangible assets using a non-deterministic framework can provide insight into future free cash flow and huge changes in equity value.

The geopolitical factors and other blockchain solutions coming from the autonomy debate are, in a rights sense, trying to re- identify how to limit the value flow of non-exclusive intangible assets. The more options there are, the greater the change in financial value. Where the intangible elephant goes depends on the choice of path.

**Keywords:** Tobin' Q; Intangible Assets; O ratio; Hi-tech companies