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Finance-growth nexus: Insights from an application of threshold regression model to Malaysia's dual financial system☆

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Abstract

The purpose of this paper is to test the growing converging views regarding the destabilizing and growth-halting impact of interest-based debt financial system. The views are as advocated by the followers of Keynes and Hyman Minsky and those of Islam. Islam discourages interest rate based debt financing as it considers it not very conducive to productive activities and human solidarity. Likewise, since the onset of the crisis of 2007/2008, calls by skeptics of mainstream capitalism have been renewed. The paper applies a threshold regression model to Malaysian data and finds that the relationship between growth and financial development is non-linear. A threshold is estimated, after which credit expansion negatively impacts GDP growth. While the post-threshold negative relationship is found to be statistically significant, the estimated positive relationship at lower levels of financial development is insignificant. The findings provide support to the above views and are hoped to guide monetary authorities to better growth-promoting policy-making.

JEL classification codes: C22; C58; E44; G15

Keywords: Credit; Financialization; Growth; Threshold regression model; Islamic perspective; Malaysia

1. Introduction and motivation

For long, the fields of economics and finance have been dominated with a wide-spread belief that a well-functioning financial system is essential to promoting welfare and growth in an economy. Though no causal influence was inferred, such a belief first received empirical support from the work of Goldsmith (1969), who found long-run economic growth to be positively correlated with the size of the financial system. This positive relationship was attributed to improved efficiency in allocating savings to optimal investments, as made possible by financial intermediation. Ever since, researchers have attempted to extend the body of knowledge regarding the finance-growth nexus and provide further evaluation of its causal relationship.

Few views have emerged concerning the same. Pioneered by Joan Robinson (1952), some economists argued that financial development[1] is but a by-product of the overall process of economic development. Others maintained that there exists a positive causal relationship between financial development and the level of economic growth (see, for example, King & Levine, 1993; Levine & Zervos, 1998; Levine, Loayza, & Beck, 2000).

However, a growing body of literature is questioning the basics of the finance-growth nexus (what is a well-functioning

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[1] A large body of theoretical and empirical literature is devoted to the determinants of financial development. Among other things, financial development is influenced by financial liberalization, legal frameworks, state-ownership of banks, political stability and globalization (Law, Azman-Saini and Tan, 2014).

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financial system?). More so since the onset of the recent financial crisis with consequences far exceeding costly bailouts to lost economic output and social pain that is expected to plague societies for generations to come. In particular,the emerging research on the impact of financilization in industrialized economies provides new emipirical support for Keynes and Minsky's views on the destabilizing role of debt-based financing.

Current trends in empirical and theoretical research are of utmost relevance to advocates of Islamic finance; as they point to the root cause of the crises; interest bearing debt-based finanical system. Interest is prohibited by Divine prescriptions in Islam[2]; for its destructive effects on human solidarity and productive activities (Askari, Iqbal, Krichene, & Mirakhor, 2012; Chapra, 2007; Siddiqi, 2004). Such trends promise validation of Islamic principles and growing convergence of views regarding the demerits of contemporary market capitalism.

To this end, the study contributes toward investigating the finance-growth nexus in a dual financial system and offers new perspective to the relationship from the lens of the converging views of Hyman Minsky, James Tobin and Islam.

The rest of this paper is organized as follows: before summarizing relevant literature in Section 2, a brief summary of Minsky and Tobin's critiques of modern-day finance is provided followed by the alternate perspective of Islamic finance, as essentially serving the real sector of the economy on the basis of risk-sharing. Section 3 presents the data. The methodology and regression results are discussed in Section 4 and 5 respectively. Section 6 concludes.

1.1. Minsky and Tobin's critiques of financialization and the "paper economy"

It may be worth diverging at this point to discuss the far-sighted critiques of the emergence of the "Paper Economy" and Financialization, offered by Minsky (1984) and Tobin (1984); to better understand their implication on the finance-growth nexus and set the discussion for a proposal of an alternative Islamic financial system that is based on risk sharing. The rapid growth of finance in industrial economies went hand in hand with the development of the theory of finance in the second half of the 1960s and 1970s, which founded the platform for the introduction of derivatives and securitization. By early 1980s, financial innovations have changed the landscape of finance. It replaced traditional banking-centered relationships with more innovative financial arrangements and products that allowed greater access to credit at cheaper rates (Rajan, 2005). As a result, the financial system threatened to assume a life of its own, overtaking the real sector of the economy. So alarming was this notion that James Tobin proposed a tax to curb expanding financialization and put a limit to the emergence of a"paper economy":

> *… we are throwing more and more of our resources, including the cream of our youth, into financial activities remote from production of goods and services into activities that generate high private rewards disproportionate to their social productivity, a "paper economy" facilitating speculation which is short-sighted and inefficient*
>
> Tobin, 1984.

The concepts of "paper economy" and "financialization" are not distinct from one another. In fact, "financialization" is described as the process where growth in the financial sector exceeds the growth in the real sector of the economy by far; it is the"decoupling"of financial activities from production of goods and services, as in Tobin's words (Menkoff & Tolksorf, 2001). It was, indeed, the "paper economy" that collapsed in the recent crisis of 2007/2008.

"Financialization" is characterized by the following: (i) the rapid expansion of the offering and forms of financial intermediaries and financial transactions; (ii) the significant growth of the financial sector in comparison with the real sector of the economy; (iii) the harming rather than benefiting of the long-term economic growth (Askari et. al., 2012).

As expected, the above characteristics are in line with those of the"paper economy", which are: (i) spread of speculative rather than productive finance; (ii) short-termism, as manifested in the rapid turnover of paper securities' trade[3]; (iii) decoupling of finance from real sector activities; (iv) extracting, rather than adding, value from the real sector of the economy; (v) lack of anchor in real assets. It is, therefore, of no surprise that "financialization" and the "paper economy" are, in general, associated with a decline in the fixed capital formation in the real sector of the economy; low economic growth; widespread speculation in a ferocious search for yield; heightened uncertainty and increased social injustices, among others (Askari et. al., 2012).

The aforementioned form of finance, i.e. speculative finance is central in Minsky's "financial instability hypothesis" (see Minsky, 1984; Mirakhor, 1985). According to Minsky, there are two financing structures: one promotes stability while the other sows the seeds of instability the more a financial structure tilts toward debt. The two phenomena are not disconnected, but rather connected as "stability is destabilizing" in Minsky's words.

Minsky holds that, in times of prosperity, businesses finance their activities using internal funds and other sources of equity finance. Borrowing is minimal, if any, and is validated by an underlying income stream sufficient to meet obligatory payment of principal and interest, accrued over the term of finance. This, Minsky refers to as "hedge finance". A system dominated by hedge finance is perceived to be stable. As profit opportunities increase during prosperity and equity

[2] In fact, interest prohibition is not confined to Islam. Judaism, Christianity and Hinduism have prohibited interest, too (Chapra, 2007). More than two-thirds of the world's population subscribe to these religions collectively.

[3] In light of this, the authors have applied similar Hansen threshold regression analysis to a measure of stock market development, namely value of stocks traded, and found a threshold after which the GDP is negatively affected by increase in the trade of stocks. Results can be provided upon request.

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