The Influence of Digital Technologies and Consumer's Over-indebtedness

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Abstract

Debt plays an essential role in people's everyday life. Household consumption theoretically stimulates the economic growth of a nation by generating revenue for the financial industry, employment and business outcomes. However, having much debt will lead to some adverse effects which include slow GDP, the impact on financial institutions, and individuals' difficulties. A recent study by (Idris et al., 2016), the researcher revealed that Malaysians currently are facing a high debt problem; over-indebtedness problem. Furthermore, with the advancement of digital technology among Malaysians users, had a trigger to the situations of fear of missing out (FAMO), where the individual will spend to not missing out and be the same level as his/her social norms, such as peers and friends. This factor will contribute to over-indebtedness. Although previous studies have stated that the digital technology effects on individual spending pattern, however, there is no study has considered the impact of digital technology towards over-indebtedness. With regards to this limitation, thus this study tries to formulate the digital technology and over-indebtedness model in filling a research gap in the related field.

Keywords: Over-indebtedness, Digital Technology, Young Generation, Financial Innovation, Internet addiction.

Introduction

Malaysians household debt has grown tremendously over the past decade, expanding from a fair 60.4% in the year 2008 to 86.7% in the year 2016. The increase in a number of financial institutions operator (banking and non-banking) to a current 45 financial institutions (27 commercial banks and 18 Islamic banks) which all focuses on a loan portfolio growth, has resulted in increasing market penetration and higher loan demand from individual consumers. Moreover, the advancement of technology and the widely used of smartphone among Malaysians relates to impulsive buying. These issues contribute to the unhealthy scenario, where its cause to the higher over-indebtedness, especially from the youngsters.

Being indebtedness was not necessarily a problem if it is manageable. Debt is sometimes perceived as necessary, but in most cases considered as detrimental and

dangerous. Most of the religious considering debt as unhealthy an avoidance activity for their followers. Christian religion viewed money lending at interest as a sin and those who defaulted on debts were viewed as dishonest and evil and treated as criminals (Braucher, 2006). Roesch and Héliès (2007) found that in Southern India, people consider debt as bad and try hard to avoid it. Besides, in India, a single woman who borrows from a man outside her family is usually forced to offer sexual favours, in turn (Guérin et al., 2011).

Meanwhile, Islam, which means peace and freedom is not encouraged by its follower (Muslim) to participates in involving in debt and urges the Muslim to avoid it as much as possible. Few hadiths and stories by Prophet Muhammad (PBUH), had enlightened on the avoidance of the debt. One from it, as narrated from Aisha (PBUH) that the Prophet (PBUH) used to say in his prayer: "*O Allah, I seek refuge with You from sin and heavy debt*". Someone said to him: "*How often you seek refuge from heavy debt*" He said: "*When a man gets into debt, he speaks and tells lies, and he makes a promise and breaks it*." Narrated by al Bukhari and Muslim.

Table 1
Bankruptcies in Malaysia

Number of Bankruptcies	
2007	13,238
2008	13,907
2009	16,228
2010	18,119
2011	19,167
2012	19,575
2013	21,987
2014	22,351
2015	18,457
2016	19,588

However, current scenario in Malaysia shows increasing numbers of household indebtedness, and it getting worst when majority from the debt holder and declare as bankruptcy are young people, age from 25 to 40 years old, which are from the groups of Gen Y, and Malay Muslim. Some questions might arise from this scenario; What are the reasons these young generation involving in debt? Why are the majority from bankruptcy cases in Malaysia young people age 40 and below?

Generation Y, also known as Millennials or Echo Boomers, were born between 1980 and 1999. Millennials are more advanced from Baby Boomers in the way of electronic "decorations," such as iPods, smartphones and laptops (Hira, 2007; Shaw and Fairhurst, 2008). They embrace technology because they were brought up around it, and as a result, are very comfortable with change. (Kapoor & Solomon, 2011). Millennials are more technologically savvy and more ethnically diverse than any previous generation, but they have poor problem-saving skills and are not independent as Gen Xers (Spiro, 2006; Artley and Macon 2009).

The increasing number of over-indebted around the world among households has become increasingly troublesome, not only because of the implications for the individuals but it also gives the impact phenomenon on the financial system and on the welfare of society

(Schreiber et al., 2010; Gathergood, 2012; D'Alessio & Iezzi, 2013). Over-indebtedness is currently one of the most significant challenges in today's environment, and it is essential to take such intrahousehold dynamics into account in analysing credit decisions and their consequences (Kirchler, Hoelzl & Kamleitner, 2008).
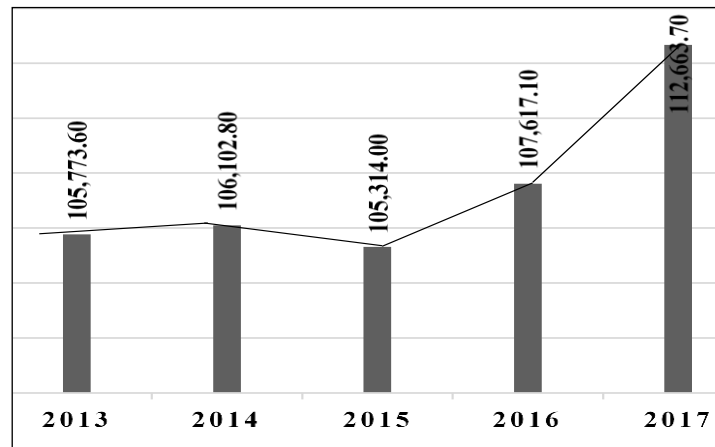

Figure 1. 2013 – 2017 Non-performing Loan

However, over-indebtedness remains highly under-researched (Marron, 2012), especially from the customer's perspective. Insights on factors related to over-indebtedness are urgently needed for the development of measures against this phenomenon (Liv, 2013; Schicks, 2014; Sweet, Nandi, Adam, & McDade, 2013). With regard to these limitations, therefore a new framework of over-indebtedness model should be undertaken, taking into consideration with the advancement of digital technologies in the current environment.

Literature Review
The life-cycle-permanent income theory analyses the spending and saving habits of people over their life arguing that individuals choose to maintain stable lifestyles (Ando & Modigliani, 1963). Indebtedness is a planned and rational decision that allows inter-temporal redistribution of consumption. However, the real evidence is, the individual is not rational in decision making, and the decision making usually influenced by the psychological, social, cognitive, and emotional factors. The behavioural-life-cycle theory affirms that individuals often do not think about spending and loan decisions using discount rates, but through mental accounting, the real way people treat financial events (Shefrin & Thaler, 1988). This way consumption plans are affected by a lack of self-control, usually ignored in economic analysis, which influences human behaviour. This theory is supported with mental accounting theory (Thaler, 1985). Thaler's idea of mental accounting shows how people behave irrationally by placing a higher value on some money than others, even though all money has the same value. The role of bias in consumer decision making makes behavioural approaches have become a vital element in explaining consumer over-indebtedness.

Digital Technology and Over-Indebtedness
It is fair to say that we are currently live in a credit-centric consumer society in times of rapid technological transition. The spread of digital technologies, especially the smartphone has produced new venues with lower entry barriers and fewer gatekeepers for both purchasing and credit management (Matas, 2015). The Western world has seen a

significant increase in mobile technology use in the last decade. In 2016, 93% of the population own a smartphone in the UK, and users spend more time accessing the Internet via a phone than through other devices, such as laptops and desktop computers. These recent trends support mobiles, and the Internet has become closely interlinked to enable "on-the-go" access to a range of facilities, including web-browsing, communication, shopping, banking, and gaming (Kuss et al., 2018). Whereas smartphone penetration rate as a share of the population in Malaysia for 2017 is 62.8%, increased by 16.51% from the year 2015 (53.92%), and the numbers are expecting to increase further (Statista DMO, 2018).

The technologies develop the role of the smartphone, i.e. mobile internet access, has completely changed the game over the last five years, and societal norms around credit changes as well as, likely, the perception of money and credit (Nanninga, Ward, & Hoong, 2015). Moreover, the growth of digital technology that affects the buying behaviour leads to the situation of impulsive buying. This impulsiveness also has a strong tendency and relationship with the debt problem. One possibility is that individuals who act impulsively in their spending decisions use forms of consumer credit which make them more vulnerable to incurring debt problems (Gathergood, 2012).

A recent study revealed one of the more common reasons for payment default for people between 18 and 25 years in Swedish is for invoice purchases and that a large portion of these relates to e-commerce (Larsson, Svensson, & Carlsson, 2016). It indicates that e-commerce might lead to individuals entering risky financial situations and even over-indebtedness. The municipal financial counsellors describe the smartphone subscription as a problematic "first credit" for their clients. It is more common to have recurring payment problems in the group with more than one mobile subscription (10% of the sample) than those with none or just one.

The technological and economic institutions offer opportunities for growing consumption and credit use, hence the emergence of credit problems. In general, the most prominently featured research fields in the analysis indicate that research on indebtedness in digital contexts focuses on a systemic perspective rather than a consumer or client perspective. The primary concern seems to be how to develop systems and business strategies to protect business owners from losses incurred from insolvent consumers, rather than to research consumers who have become indebted because of overconsumption in a digital context and the impact this may have on their lives (Carlsson, Larsson, Svensson, & Åström, 2017).

Despite the explaining scenario, however the consequences of digitisation for practices of consumption and indebtedness among remain to a large extent under-researched. Furthermore, one implication of the mobile digital development for consumer practices, which has not yet received much attention in research, is the elusive contexts for consumption. This growth brings concerning recurring payment problems and over-indebtedness. The extensive literature discussed on the consequences of the mobile phone towards mental health, such as depression, addiction and anxiety (Elhai, Dvorak, Levine, & Hall, 2017; Nalwa & Anand, 2003; Rosen, Whaling, & Carrier, 2013).

Hence, there is a need for more research on how personal financial behaviour may change in relation to the development of digital technology, especially the smartphone towards over-indebtedness. Also, potential links between changing credit behaviour in digital society and over-indebtedness in individuals need to be more thoroughly investigated. Therefore, the purpose of this conceptual paper is to gain an understanding of whether, and

if so, to what extent, digital technology (smartphone) are linked to over-indebtedness issues in contemporary international research.

Millennials and Debt Problem

Earlier research (e.g., Lehtinen & Leskinen 2005) indicates that young people under 30 years of age get entangled in debt for two primary reasons: setting up their own home and raising their social status through consumption. These efforts seldom succeed without credit, and it is not unusual for young adults to have several credit cards for home furnishing simultaneously. Both decreasing income and increasing expenses can cause indebtedness. Over-indebtedness does not pertain to anyone age or life situation, either.

The young are the most vulnerable because of their little experience and insufficient resources. Older people and families with children have the most financial commitments. Commercial enterprises today offer credit with aggressive and appealing marketing campaigns (Raijas et al., 2010). They have made it very easy to obtain a loan without collateral or guarantees (Saarinen, 2001). Also, more young people and females are now getting caught in the debt trap (Asikainen, 2001).

Easy access to credit when they were younger had tempted some into high levels of personal consumption, leaving them with debts that, further along the life course, post family formation, and in labor, market characterized for them by short-term, insecure low paid work interspersed with periods of reliance on welfare could not adequately be serviced. More typical, however, were the arrears that arise out of living long-term on a low income, whether derived from low wages, benefits or churning between the two. (Goode, 2012).

Methodology

The process of developing this framework will be in two stages. First, in the step of the item development process (qualitative data), we will conduct a focus group interview with debt problem consumers. The debt problems consumers refer to the default borrowers that under the recovery and collection credit in the financial institutions, and also participants that involve in a Debt Management Program (DMP) under AKPK. We plan to interview the selected group, to get an in-depth understanding on why young generations get involved in over-indebtedness, and to get a clear view on whether the two proposed variables (digital technology and internet addiction) effect to their impulsive spending and also over-indebtedness. During the interview process, we will record all the interview session to avoid any misunderstanding and to avoid from missing necessary information in the interview session. Later, all the recorded interview will be and transcribe, and we will show all the transcription from the conversation to the respondent for confirmation. Similar items from the interview results will use as a construct item in formulating the model. We will use an ATLAS software for this qualitative measure.

Second, we plan to distribute the questionnaire (quantitative data) to the selected respondent, which are i) participants of the DMP program and/or ii) defaulter's borrowers from financial institutions. These two group are selected due to the criteria of over-indebted borrower. We will focus on distributes the questionnaire to the selected respondent as in (i) and (ii) only for the target group, age 25 to 40 years, which are Gen Y or millennials. The reason why we will be doing so because they are the right person who is experiencing the over-indebtedness, and able to give a correct answer for this study. Lastly, in forecasting the relationship between these variables, we will run and test it by using a regression analysis with PLS-SEM.

Conclusions

Malaysians household debt keeps on increasing from year to year. The increasing number of loan demand is due to the easy access to the credit and also because of the advancement of digital technology influence that makes individual tries to *Keep up With the Joneses*. Debt is not a problem if it is still under control. The debt will become a problem when it's become over-indebtedness. As many scholars declared youth as a government's "assets", thus a well balance of youth's income and debt should be a more significant concern for a nation, as higher debt or over-indebtedness had proved to affect individual health, psychology, and also sacrifices on one's primary need, in order to meet the debt obligation. However, statistics from the Malaysian Department of Insolvency (MDI) and AKPK'S showed that most of the bankruptcy cases and over-indebtedness come from millennials.

Moreover, previous studies also had identified that the overuse of the internet or also known as internet addiction would lead to the impulsive behaviour. Also, the development of digital technology that widely uses in today's environment had made the buying and selling transaction become so easy and, all of this scenario lead to the over-spending among buyers, especially among youngsters. Besides, scholars had reminded a new study on the effect of digital technology towards consumption and over-indebtedness should be undertaken. With respect with this, therefore a grounded work on how digital technology affects to over-indebtedness should undertake. This framework is proposedly to develop a digital technology and over-indebtedness model that will benefits to the policy maker and others related parties, in order to reduce the level of over debt among the Malaysian millennials. It is hoped that this poposed model will be a guideline for policymakers, particularly for Bank Negara Malaysia (BNM), AKPK, Ministry of Higher Education and other related parties to design a syllabus that will create and boost technology awareness among Malaysians and to upgrade the quality of future young generations in coping with over-indebtedness problem.

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