

Chapter 8

HOUSEHOLD DEBT IN VIETNAM: AN OVERVIEW

By

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Introduction

Over the past two decades, household borrowings worldwide has increased significantly, both in absolute terms and relative to household income, reaching record levels. Such sudden growths in household debts have received much attention on account of its important macroeconomic and financial implications. In developing market economies, the delivery of financial services has advanced, albeit with large differences in access. Some programs may also have led to an oversupply of credit and may be responsible for unproductive investments which may have resulted in levels of indebtedness exceeding the repayment capacity of households. This, in turn, could weaken the social and economic well-being of households and result in financial distress. Therefore, we analyze empirically the behavior of household loans and how they react to changes in macroeconomic conditions and housing prices to shed some light on the nature of the recent debt increase and its implications for measures to reduce financial vulnerability.

The outline of the paper is as follows. First, we discuss the relevance of household financial conditions for macroeconomic stability by explaining the links between household debts and a number of determinants in view of some stylized facts and on the basis of the theoretical literature. The second section provides an overview of macroeconomic and monetary policy in Vietnam over the period from 2000 to 2016. Then, in the third and fourth section, we conduct event analysis and discuss some data related to household debt in terms of its performance and linkage with macroeconomic factors in Vietnam. A close examination into the housing market in Vietnam and its relationship with household debt is depicted in the fifth part and finally, a few tentative conclusions are offered.

1. Literature Review

Since the 1990s, a number of studies have been conducted with a focus on the topic of household debt analysis. Former studies assumed and established models for measuring the impact of interest on household loans. Later studies with more data revealed deeper analyses of household debt structures in relation to macroeconomic factors such as monetary policy, gross domestic product (GDP) or consumer price index (CPI). The most remarkable ones are the following researches.

Mian and Sufi (2011) studied the way in which home borrowers respond to house price increases and then investigated the debt channels based on the equity of the owner using a set of data including personal credit information from the U. S. national consumer credit bureau. The real impact of home loans depended on what the householders did with their loans. There is no evidence that there is a link between the increase of house prices and new home purchases or real estate investment volume. In fact, equity-based debt is not used to pay for a credit card balance even for households that rely

heavily on credit card debt. Gathering information about defaults, borrowing against the rise in equity caused a relative decline in default rates between 2002 and 2006, especially for homeowners with low credit scores and use high credit card. However, the fall in default rates began in 2006. By the end of 2008, the homeowner default rate jumped with the rise in home prices during 2002-2006.

Goodhart and Hofmann (2008) examined the relationship between money, credit, housing prices and economic activity in industrial countries over the past three decades. The three main findings were: (i) significant multi-dimensional correlations between home prices, monetary variables and macroeconomic variables; (ii) a stronger relationship between house prices and monetary variables than former studies with the sample ranging from 1985 to 2006; (iii) a stronger impact of currency and credit when home prices are booming. However, the two final results were not statistically significant due to their high reliability. They proved the multidimensional relationship between house prices, money supply, private credit, and macroeconomics. Currency growth had a significant impact on both home prices and credit, which in return affected the currency. They showed that shocks in house prices, credit and currency have had significant effects on economic performance and price inflation. Shocks to GDP, CPI and interest rates are found to have a significant effect on home prices, currencies and credit. The effects of a currency shock and credit on house prices might be stronger when home prices were booming. The study suggested that monetary growth might make the central bank respond indirectly to imbalances.

Kiyotaki and Moore (1997) aimed to answer a research question on whether, theoretically, the interaction between credit limits and asset values becomes a powerful transmission mechanism in which the impact of real estate price shocks is exaggerated and diffused. They discovered small and temporary shocks from technology and income distribution can create large and continuous fluctuations in asset and output values. Specifically, they showed interest rates interacting with asset and output values. A temporary increase in productivity causes a reduction in interest rates, which increases the price of land and output rather than inputs in an open economy where interest rates are constant.

Iacoviello (2004) showed that if the borrowing capacity of indebted households is tied to the value of their home, house prices should enter a correctly specified aggregate Euler equation for consumption. The author developed a simple two-agent, dynamic general equilibrium model in which home (collateral) values affect debt capacity and consumption possibilities for a fraction of the households before deriving and estimating an aggregate consumption Euler equation, and estimating its structural parameters. The results provided robust support for housing prices as a driving force of consumption fluctuations.

After the Great Recession started in 2007, Lyons and Muellbauer (2013) realized the importance of understanding housing market dynamics as contributors to macroeconomic fluctuations, instead of a typically omitted variable in the analyses of housing prices in credit conditions. The authors examined Ireland, where an extreme housing market cycle saw prices increase four-fold in the decade to 2007, before falling by more than 50% by 2012. Using a quarterly dataset from 1980 to 2012, the study estimates an error-correction model that reveals the long-run relationship between house prices and fundamentals. Those fundamentals include the ratio of income to the stock of housing, the ratio of persons to households, user and transaction costs, and credit conditions, as measured by the ratio of mortgage credit to deposits. While the earlier phase of Ireland's house price boom was a result of a number of factors, growth between 2001 and 2007 was almost due to the easing of credit conditions. This study indicated that credit conditions were, along with the real rate of interest, key to determining equilibrium in the housing market. Normalization of expectations in relation to

housing can be expected to generate some upward pressure on prices in coming years, but may be counteracted by a normalization of credit conditions.

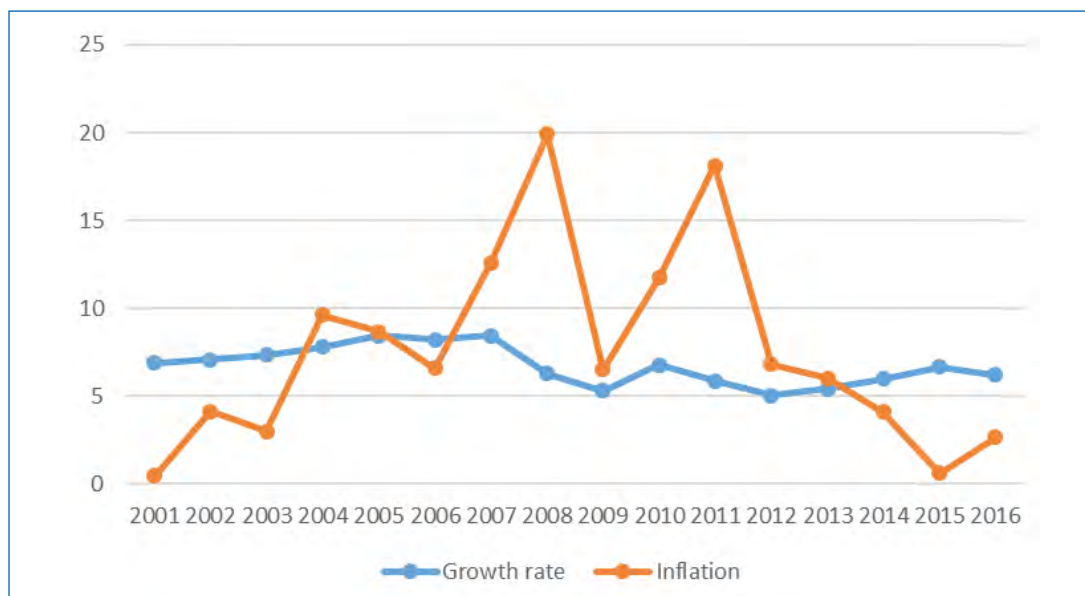
2. Vietnam Macroeconomic and Monetary Review from 2000 to 2016

2.1 Vietnam Macroeconomic Review from 2000 to 2016

Over the period from 2000 to 2016, Vietnam's macroeconomic situation has become increasingly complicated. Prior to 2007, rising world oil prices and the recovery of the world economy coupled with loosening monetary, fiscal and economic growth policies have had a positive impact on the growth of the world economy. Vietnam, with an average GDP growth rate of around 7% in the period 2000 – 2007, became one of the countries with the highest growth rate in the world. However, due to the global financial crisis, GDP growth dropped from 7.13% in 2007 to marginally above 5% in 2014. As a result of the government's policy management and lifting of barriers for national economic development to reap the positive dynamics derived from the recovery of the world economy, Vietnam's economic outlook began to improve, recording a phenomenal growth in 2015 (6.68%) and 2016 (6.21%).

2.1.1 Inflation

Figure 1: Growth Rate and Inflation in Vietnam 2000-2016



Source: General Statistics office of Vietnam.

Starting the period at a really low inflation of 0.5% in 2001, the figure increased significantly to 9.5% in 2004, marking the first return of high inflation after a long period of stability. Inflation continued to fluctuate afterwards. Subsequently, with the huge capital inflows in 2007 and the boom in the banking sector after Vietnam officially joined the World Trade Organization (WTO), inflation rose to 12.7% in 2007 and reached a peak of 19.9% in 2008. Under the influence of the global financial crisis 2008-09, the inflation and growth rate decreased sharply in 2009. Hence, in 2009, the Vietnamese government announced an economic stimulus package of US\$6 billion (6.8% of GDP) in order to boost the economy. However, it had a considerable impact on the inflation in the following years, with the figure rising significantly to 18.13% in 2011. Although inflation has been kept to a

level of single digit since 2012, deemed as a low inflation rate based on the State Bank of Vietnam's (SBV) commitment to price stability, the expectations of price increases are always hidden and can, in turn, possibly affect the sustainable development of Vietnam's economy.

2.1.2 Sustainable exports growth rates

On average, the annual export growth rates in recent years have been observed at around 18%, which has become an important driving force for economic growth in the country. Up to now, Vietnam has over 25 items with an export turnover of over US\$1 billion, of which eight products have reached over US\$5 billion. In terms of the export structure, the proportion of raw and semi-processed goods decreased sharply, while the proportion of refined products increased significantly. The export and import market has expanded with increasing turnovers, strengthening the traditional market and opening up many other potential markets. The trade balance has improved markedly since 2012 and has shifted to a surplus after years of continuous deficits.

2.1.3 Guaranteed National Financial Security

Public debt, government debt and foreign debt of the country are guaranteed to the extent permitted by the government. In recent periods, the system of mechanisms and policies on public finance management in Vietnam has been gradually enhanced in line with the market economy regime, more closely approaching the international practices in terms of tax reform, budget management and public debt management. As of December 31, 2014, public debt stood at 59.6% of GDP, of which government debt stood at 47.4% of GDP; Government guaranteed debt at 11.34% of GDP while local government debt was 0.8% of GDP. Additionally, the government's borrowing structure has changed in the direction of increasing the proportion of domestic borrowing with longer maturities.

2.2 Vietnam Monetary Policy Review from 2000 to 2016

In the context of an increasingly integrated economy with the world economy leading to faster trade and international capital flows, the construction and operation of monetary policy has become more sophisticated and demanding. Vietnam has long been known to pursue multi-objective monetary policies. Monetary policy has been made flexible via the adjustment of financial tools. The expectation is for the country to accelerate the growth rate, control price-inflation level, stabilize monetary policies as well as use monetary policies as a supplementary instrument in an attempt to stabilize the national budget, ameliorate poverty and ensure national security (UNDP, 2012).

According to the Law on the State Bank of Vietnam (SBV) 2010, in addition to the duty of stabilizing the value of the Vietnamese currency, the SBV also has an essential part to play in accelerating socio-economic development. Therefore, to some extent, the monetary policy framework in Vietnam is obscure and conflicts may sometimes arise among monetary policy objectives. In general, the main objectives of monetary policy are dependent on the macroeconomic conditions; therefore, the SBV is not independent of the government in implementing the national monetary policy.

The SBV has also taken a number of steps to gradually use its monetary policy instruments independently, such as exchange rates and open market operations (OMO). An inflation targeting monetary policy regime is being seriously considered by the government and the SBV and Vietnam is on the way to deploy such a regime in the future.

Due to the negative effects that the 1998 Asian crisis imposed on the economic growth rate over the period from 2000 to 2005, the SBV increased money supply markedly to support economic growth. Additionally, from the year 2000, confronted with a large capital inflow, while having to maintain a stable exchange rate, the SBV decided to purchase foreign currency, leading to a drastic increase in the money supply. As a consequence, inflation rates increased sharply in 2004 to 9.5% from a low of 3% in 2003, much higher than the 5% target set by the National Assembly. Inflation rates continued to increase on an annual basis, peaking at 20% in 2007, the highest level since 1990, as a result of high money supply. In this scenario, the government had to turn its attention to inflation and monetary policy was switched from loose to tight.

With its accession to the WTO, Vietnam has been exposed to a higher level of and wider scope of integration with the global economy. As a result, since 2006, Vietnam has been on the receiving end of huge capital inflows from foreign direct investments, foreign indirect investments, and remittances. These huge capital inflows have had significant effects on the money supply over the recent decade. From 2006 to 2009, money supply experienced a substantial increase, reaching a peak in 2007 (at 50%). The fluctuation of the money supply has had negative impacts on the exchange rate. Before 2006, the average quarterly depreciation rate was 0.9%. However, during periods of crisis from 1997 to 1998, the depreciation rate was 7.6% and from 2007 to 2008, the depreciation rate was up to 16.3%. It can well be seen that the impact of macroeconomic conditions on monetary policy targets has been noticeable from 2000 to 2016.

2.2.1 Interest rate

The interest rate mechanism has made fundamental changes. Since August 2000, the SBV has stepped up the easing of interest rate regulations, gradually moving from operating, by imposing “hard” ceiling interest rates. The difference between the average lending rate and the average mobilizing rate is that credit institutions agree with the borrower on the lending interest rate to a certain extent and the full liberalization of interest rates on VND deposits.

As for the interest rate tool, after the interest rate of the economy was liberalized, the SBV used some market-oriented interest rates to control the economy’s interest rates: (i) a copy published monthly by the SBV; (ii) the refinancing interest rate and the discount interest rate were used as a corridor for interbank interest rates; and, (iii) open market interest rates. Depending on the situation of economic growth and inflation, the SBV has adjusted the interest rates accordingly.

From the beginning of 2007 to June 2008, with the goal of absorbing excess liquidity caused by foreign capital inflows, the SBV also continuously adjusted the interest rates. In late 2008 and early 2009, with the downward pressure on inflation, the SBV reduced its benchmark interest rates to support economic growth.

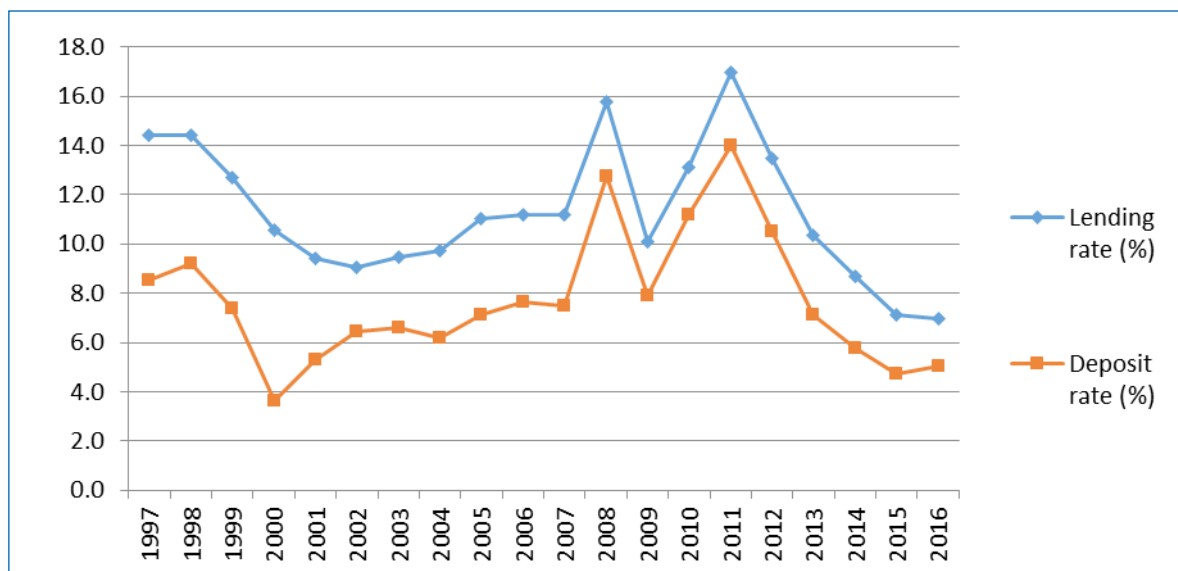
In 2009 and the first quarter of 2010, the SBV implemented the basic interest rate mechanism for which credit institutions set mobilizing and lending interest rates in VND not exceeding 150% of the basic interest rate. In 2011, the SBV gradually adjusted working interest rates to implement strict and prudent monetary policy in order to fight inflation.

In 2012, as the inflation forecast tended to decrease, the interest rate tool has been actively managed in a downward direction in line with the reduction of inflation and expected inflation, all the while ensuring that the management of the real interest rate continue to be cautious, with the risk of inflation rising again. Recently, refinancing demand is less likely due to the excess of liquidity in the

credit institutions. From March 18, 2014, the refinancing rate was 6.5%, much lower than the 15% at the end of 2011 and the discount rate was 4.5%.

With regard to interest rate instruments, the SBV has used different instruments since 1990s. Figure 1 features the interest rate in domestic currency.

Figure 2: Vietnam Interest Rate in Domestic Currency



Source: IFS.

Interest rates have gradually been liberalized since the mid-1990s. Previously, the SBV set deposit as well as lending rates and, since October 1992, ceilings for lending rates and floors for deposit rates. Major steps towards market-determined interest rates were taken with the lifting of floors for deposit rates with the exception of foreign currency deposits in 1996 and for ceilings on lending rates in August 2000. The ceilings for lending rates were replaced first by a basic interest rate, which was announced by the SBV every month and which commercial banks could only exceed within a set margin. Interest rates for foreign currency loans were liberalized in July 2001 and lending rates for loans in domestic currency in June 2002. Since 2002, commercial banks in Vietnam have been able to legally set lending rates as well as deposit rates according to market conditions (BIS, 2006).

However, in 2008, the ceiling for lending rate seemed to return. SBV announced a basic rate on a monthly basis, for which the commercial banks could base the lending rate and deposit rate on, albeit within a scope of 150% of that rate.

After that, in April 2010, commercial banks were free to set the lending rate for all areas but from 2012, the ceilings for the lending rate were set for five priority areas, including Agriculture, Export Products, Small Medium Enterprises, Supporting Industry, and High-tech Enterprises (12% per year from 2012 to 2014 and 8% from 2014 up to now). Since 2011, SBV has resorted to some interventions to control short-term deposit rates, especially ceiling deposit rate measures for both domestic and foreign currency.

2.2.2 *Reserve Requirement*

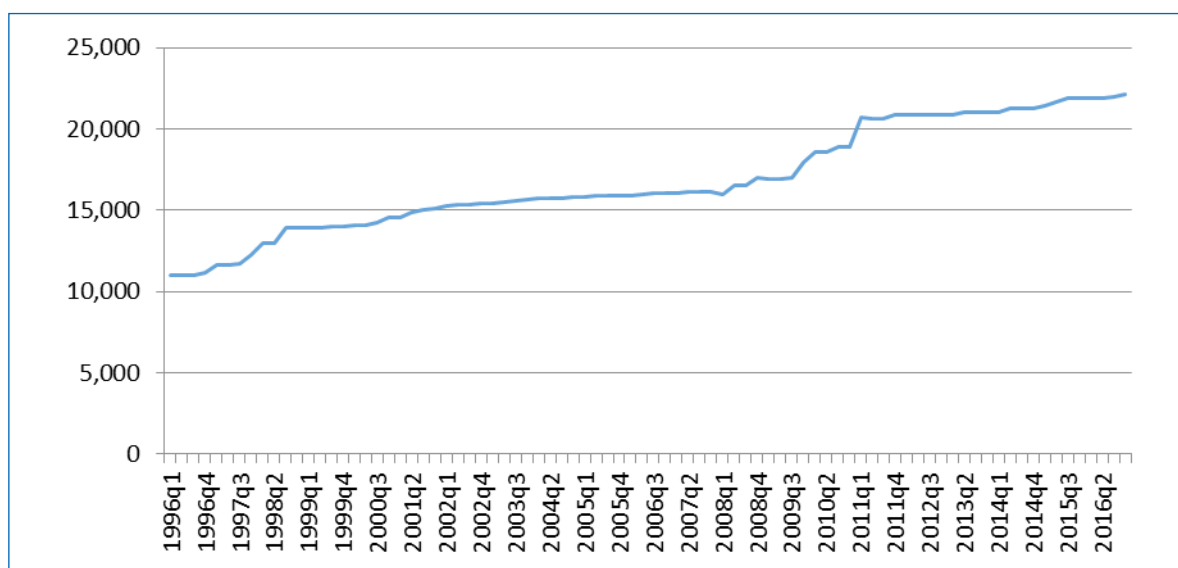
The reserve requirement ratio has been adjusted to be more flexible in line with the objective of monetary policy and monetary evolution in each period. In 2007, to neutralize the excess liquidity in the banking system due to the influx of foreign currency and also to tighten monetary policy to curb inflation, alongside open market instruments and issuance of bills. In the meantime, SBV increased the reserve requirement for credit institutions (CI) in mid-2007 and early 2008 and increased the interest rate on CRR. By the end of 2008, the State Bank of Vietnam reduced the reserve requirement to decrease the liquidity pressure for credit institutions and reduce the cost of capital mobilization, thereby encouraging the CI to increase mobilization and lending to the economy. In particular, the bank reserve ratio declined sharply from 11% in mid-2008 to 3% in the first quarter of 2009 and remained at that level until now. The ratio of foreign currency deposits decreased more slowly, from 11% in 2008 to 4% in 2010. From September 2011 to now, it has been maintained at 6%.

2.2.3 *Open Market Operations*

Beginning in July 2000, open market operations have been constantly improving and becoming the main monetary regulator of the SBV. Since 2007, with the trend of foreign currency flowing into Vietnam, the pressure on the VND has caused the SBV to step up its buying of foreign currencies to increase foreign exchange reserves and stabilize exchange rates. In the second half of 2009, the bid volume which was boosted by the stimulus program of the government, started to take effect, increasing the demand for capital for production and business. In 2008-2009, the term of tender offer was 7 and 14 days respectively. In the first 3 quarters of 2010, due to the 4% interest rate subsidy package for short-term loans, the SBV's additional 28-day tender offer to support liquidity for credit institutions, facilitated credit institutions to reduce market interest rates and continue to support economic growth.

2.2.4 *Foreign Exchange Rate Policy*

Figure 3 depicts the evolution of the VND/USD rate since 1996. As illustrated, there was a significant depreciation of the Vietnam Dong from 1996 to 2016. The exchange rate policy has become increasingly flexible since 1990s. In early 1999, the SBV switched to a type of exchange rate system called the crawling peg exchange rate system, which the IMF has classified as a “de facto managed floating regime (managed floating with no pre-announced path for exchange rate)”. The SBV announces a daily official rate which is the weighted average of the exchange rates quoted in the interbank market on the previous day. Since the interbank rate can fluctuate around the official rate within a range of +/- 0.25% (since July 2002; the band was + 0.1% between February 1999 and July 2002), the interbank rate can gradually impact the official exchange rate. While fluctuations of +/- 0.25% are, in principle permitted, the actual daily fluctuations have, in general, been much smaller, staying within a range of 0.1% around the interbank exchange rates of the previous day. While Vietnam has an officially managed floating exchange rate system, the exchange rate system actually functions more like a fixed exchange rate system (BIS 2006) but is now a crawling peg regime.

Figure 3: VND/USD Exchange Rate 1996-2016

Source: IFS.

In terms of exchange rates, in the period 2000-2007, corresponding to the period of the stable economic development and associated with it, a relatively stable dollar exchange rate mechanism, prices in the free market were stable and anchored to the official rate. Since 2007, due to the massive influx of indirect investments into Vietnam, US\$ supply has increased sharply causing the exchange rate to stabilize. Starting from 2008, the exchange rate fluctuated sharply. Along with the economic downturn, the flow of indirect investments into Vietnam has started to reverse. The general trend during 2009 - 2011 is a nominal depreciation of the VND against US\$.

In the period before 2011, the exchange rate was under constant pressure with the foreign exchange market being unstable. Therefore, in February 2011, the State Bank adjusted the exchange rate by 9.3% and narrowed the trading band from + 3% down to + 1%. After that, SBV implemented flexible intervention in the market to stabilize the exchange rate, thus reducing dollarization.

In 2012 and 2013, the SBV aimed to control exchange rate variation by no more than 2-3% per year to influence the depreciation expectations of the dong, thereby enabling enterprises to take the initiative to set and take up real estate and business development. The SBV's operating guidelines for 2013 show that the exchange rate was only adjusted 1% on June 28, 2013.

By 2014, the SBV adjusted the exchange rate by only 1% on 19 September and remained unchanged until the end of the year. In 2015, due to the global economic turmoil, the adjustment of the exchange rate of the Chinese yuan and the Federal Reserve's (Fed) raising of interest rates caused the exchange rate to be unstable by the end of 2015. The exchange rate in Vietnam was quite high, which caused the SBV to cut prices three times in FY2015 (January, May and August) by 1%. With the devaluation of the domestic currency, in August 2015, the SBV adjusted the exchange rate band from + -1% to + -2% on August 12, finally + -3% on August 19.

Since January 2016, a central exchange rate regime is applied where the central rate is announced daily by the SBV. Commercial banks will fix their own exchange rate within a set margin (currently +/- 3%). The daily central exchange rate is based on: (i) the previous day's dong/US\$ exchange rate;

(ii) exchange rates of countries that have substantial trade and financial links with Vietnam; and, (iii) domestic macroeconomic conditions.

2.2.5 Restructuring the Banking Sector and Non-performing Loans

Rapid growth of the banking system in the period of 2007-2008 resulted in a high rate of non-performing loans (NPL) of the system. Culminating in 2012, NPL of the system was 4.12% for which commercial banks were 4.67%. After implementing the project of restructuring the banking system with the focus on the NPL of the entire system, the NPL ratio has tended to decrease since 2012, from 4.12% in 2012, down to 3.61% in 2013 and 3.25% in fiscal year (FY) 2014 and less than 3% at the end of FY2015, reflecting the results of NPL management to limit the occurrence of new NPLs.

The legal documents on finance in the field of credit banking continue to be reviewed and finalized. Implementing the scheme on restructuring of the system of credit institutions in the period of 2011 - 2015, the SBV has approved the restructuring plan for the weak joint stock commercial banks, thereby improving the financial capacity and solvency of credit institutions; minimizing the risk of breakdowns and ensuring a safe system. In addition, many solutions have been developed to detect, treat and prevent cross-ownership.

However, the level of accumulation and segmentation is still relatively high; State-owned commercial banks currently account for 55- 57% of the deposit market share and credit market share of the whole system. People's credit funds, although large in numbers, have a small share of deposit mobilization (less than 1%) and their operation is not effective. Despite a downward trend in the last few years, market segmentation is relatively clear in customer groups by industry and by ownership. Meanwhile, the segments of micro credit market, credit for small and medium enterprises have not been properly examined.

Credit risk is high, particularly in relation to bad loans. The NPL of Vietnamese commercial banks are mainly due to the lack of /not strictly appraised loans related to: (i) policy lending (under official government mandate and tacit approval); (ii) lending to projects/ businesses of members of the board of directors/leaders of commercial banks or borrowing from relatives; (iii) real estate/securities loans. The loan risk also relates to valuable mortgages that may fall sharply if the asset bubble is "pricked" and/or overvalued (deliberately) (for example, real estate), or by policy risk. In addition, the failure to fully apply international debt classification standards can create a psychological illusion of bad debt and the accompanying risks.

Credit risk is linked to excessive "double deviation" (in term structure and the demand for money in the balance sheet of commercial banks). The excessive deviation of term structure can be seen in the fact that short-term loans and short-term deposits still account for a large proportion, about 75%, but commercial banks use an excessive proportion to lend medium- and long-term. This situation poses a major risk, especially when capital is lent to projects with low efficiency, lacking the necessary expertise. The deviation of the currency structure is very sensitive to exchange rate fluctuations, especially in the context of high dollarization and gradually liberalized capital account in Vietnam.

Operational risk also relates to cross equity (between commercial banks, corporations/corporations that engage in financial activities, real estate). This creates interest groups that can dominate the market, which makes it difficult to separate ownership, thus hindering the process of banking supervision and restructuring; causing strong price fluctuations in the stock market.

Operational risk, especially liquidity risk, high interest rate, especially when many banks have limited financial capacity, weak risk management capacity (CAMEL indicators have not met the requirements Basel I), whose main source of income is based on credit activity.

International practices and standards on banking management and administration such as risk management, asset management, debt, customers, products, internal auditing, etc., have not been fully implemented. In general, banks' internal governance has yet to meet international standards such as CAMELS and Basel.

In addition to formal credit markets, informal credit markets remain relatively large in Vietnam, mainly in rural areas. The black credit crunch from 2011 to now clearly shows the scale and great damage that be inflicted from the credit crunch. From 2011 up to now, in the context of the State Bank tightening monetary policy, the lending interest rate is very high and selective with the real estate market plummeting. Many (about 12%) enterprises encountered difficulties and were forced to suspend operations or faced dissolution, coupled with the negative impact from domestic and international economic difficulties and abovementioned weaknesses and risks.

3. Household Debts in Vietnam

3.1 Database about Household Debts

OECD defines household debt as “all liabilities that require payment or payments of interest or principal by the household to the creditor at a date or dates in the future. Consequently, all debt instruments are liabilities, but some liabilities such as shares, equity and financial derivatives are not considered as debt. According to the 1993 System of National Accounts, debt is thus the sum of the following liability categories, whenever available/applicable in the financial balance sheet of the households and non-profit institutions serving households sector, such as: currency and deposits; securities other than shares, except financial derivatives; loans; insurance technical reserves; and, other accounts payable. For households, liabilities predominantly consist of loans, in particular mortgage loans for the purchase of houses. This indicator is measured as a percentage of NDI.”

Vietnam does not currently have official household debt statistics as defined by OECD. In this report, we use data provided by the SBV to illustrate household debt data in Vietnam. These can be found in the table on outstanding credit by type of organization and individual for credit institutions operating in Vietnam. However, this statistical method has changed from time to time as the SBV's reporting regime has changed over time.

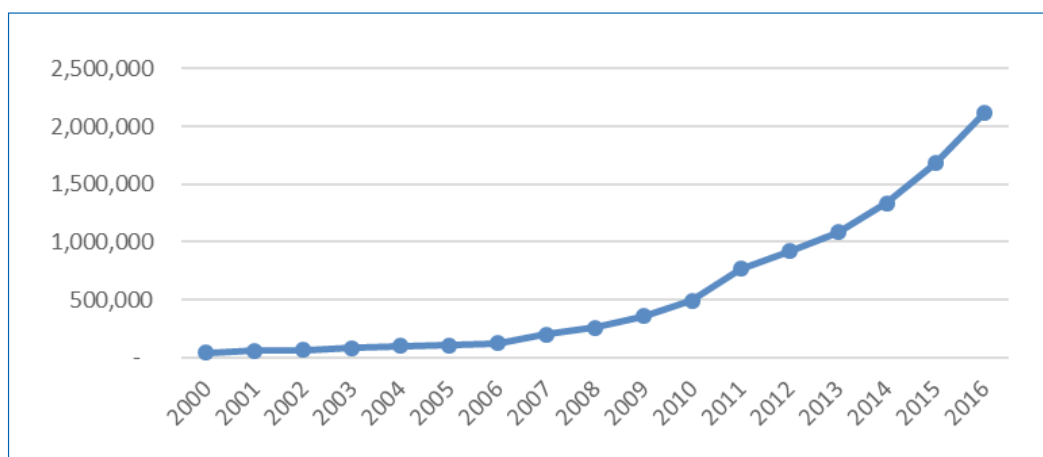
- 2000-2004 period: The data used are personal outstanding debts - outstanding loans of individuals.
- 2005-2010 period: The data used are individual economic data. Such data consists of the outstanding debt of production and business households in the agricultural, forestry, fishery, industry-construction sectors, non-cooperative services, which were established under the Cooperative Law and have not yet been registered to establish a business. In addition, credit granted to officials, students, and those who work abroad is allocated to the credit granted to the individual sector.
- From 2011 up to now: The data used comprise of business households and individuals (including individuals, households producing and trading in agriculture, forestry, fishery, industry, construction, non-cooperative services established under the Cooperative Law and not yet registered for the establishment of enterprises).

Thus, household debt figures for the 2000-2004 period are the lowest, followed by the addition of business households in the period of 2005-2010 and business households and individuals in general, making banking credit the largest in the period from 2011 till now. Based on the available data, albeit with no basis for unifying the input of the data, these data series are used tentatively to illustrate the outstanding household debt of Vietnam's credit institutions.

It should be acknowledged, however, that these data only reflect the household debt figures in the banking system, and does not include household debt data in the non-banking system. Traditionally, people would first borrow money from their friends and relatives to meet their financial needs before resorting to other formal debt instruments. With the high number of people living in rural areas, knowledge about and access to official credit from credit institutions is still limited. Thus, many have opted to borrow money from informal agents with high interest rates - known as black credit. Black credit is the form of mobilization credit outside the banking system. They are not registered businesses and unlicensed as well as also outside official management of the government. A common form of black credit is usury in which one organization mobilizes and lends with high interest rates. The procedure for such activities is usually a lot less complicated than the credit operations of formal banks. The size of this market is not quantitatively known but at the end of 2011, this figure was estimated to reach 22% of the total credit of the banking system. According to some researchers, the total black credit of Vietnam accounts for 30% of total credit provided by commercial banks, or about US\$50 billion, which is considered extremely high by international standards (Van Ha Nguyen, 2016).

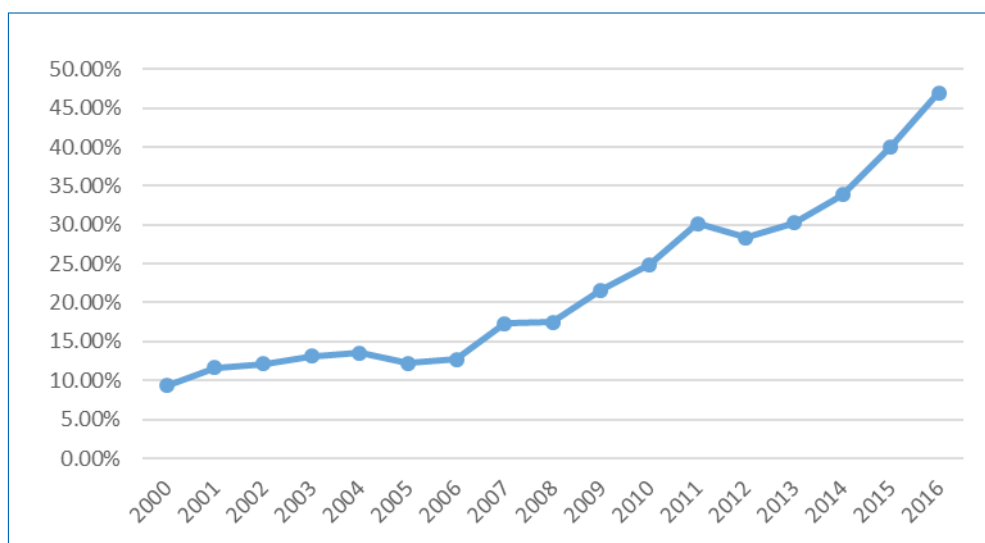
3.2 Trend of Household Debts in Vietnam

Figure 4: Household Debts Level in Vietnam from 2000 to 2016 (million VND)



Source: SBV.

Household debts in Vietnam have grown rapidly over the years from 2000 to 2016 with an average growth rate of 28.58% per year. Between 2000 and 2016, household debt increased from VND 41.3 trillion to VND 2116.2 trillion (by 51 times). From 2005 up to now, household debt in Vietnam has tended to increase but the rate of increase is not uniform. Household debt rose sharply in the period 2007-2011, sustaining an increase of around 20% in the following years.

Figure 5: Household Debt/GDP in Vietnam from 2000 to 2016

Source: Calculation by authors.

The household debt/GDP ratio has grown significantly from 2000 to 2016. During the period 2000-2006, the figure stayed at around 12% but it increased gradually from 2006 to 2011 from 12.7% to 30.2%. It decreased slightly in 2012 and rose significantly again to reach 47.0% in 2016. The increase in household debt in Vietnam supported economic growth and enabled more people to become home owners. However, recent studies have shown that the beneficial effects of economic growth have declined as the leveraging became increasingly high. Cecchetti et al. (2011) estimate that when household debt to GDP exceeds a threshold value of 85%, then increases in household debt have a negative medium-term relationship to macroeconomic aggregates such as GDP growth, consumption, and employment. The relationship between increasing household debt and financial crises is more pronounced when household debt to GDP exceeds a threshold value of 65%.

As Vietnam's household debt/GDP ratio was 47% in 2016, still relatively far from the threshold level of 65%, a potential crisis is unlikely. The increase in household debts has in fact supported the country's economic growth. However, with the high increase in household debt/GDP ratio in recent years, it is worth monitoring this indicator carefully. If it keeps rising significantly in the coming years, SBV should implement measures to control it and minimize vulnerabilities to financial stability.

Figure 6: The Growth Rate of Household Debt and Total Credit of the Economy from 2000 to 2016

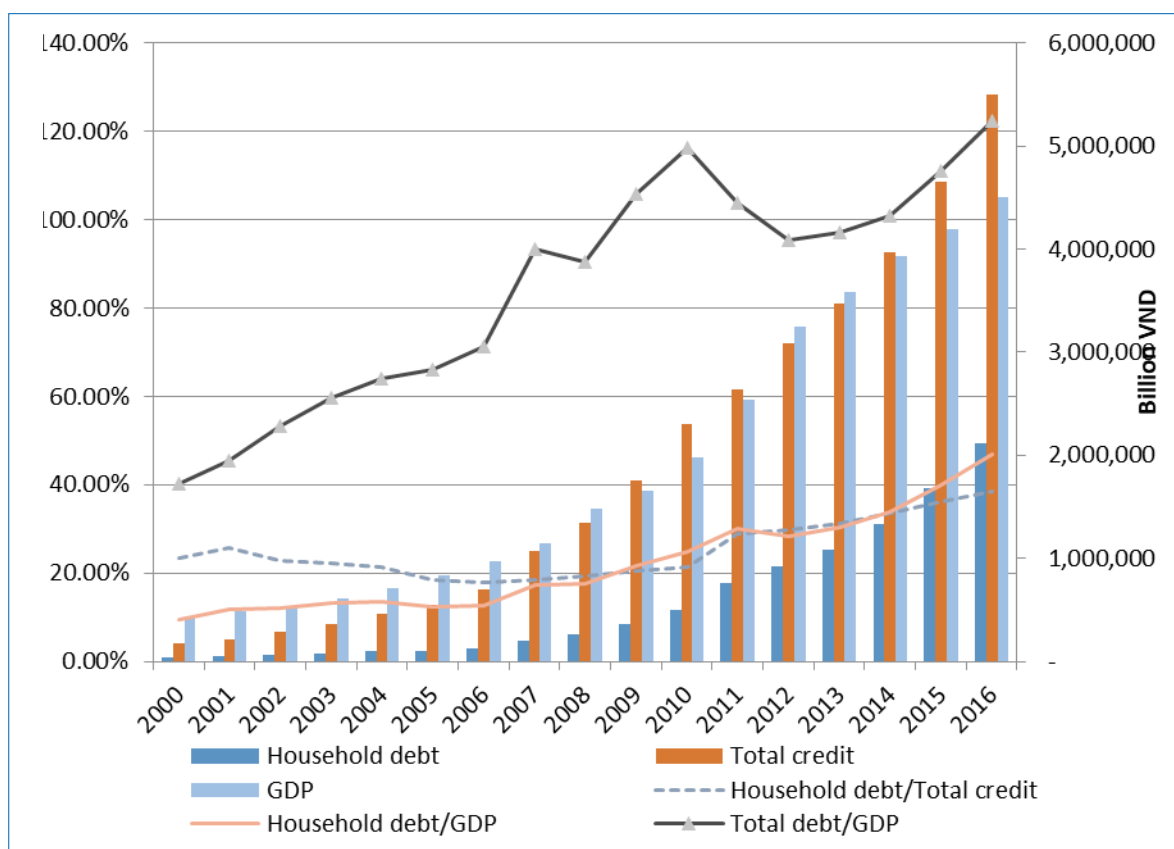


Source: SBV.

The growth rate of household debt follows the same trend as the growth of total outstanding loans in the economy. In 2011, the growth rate of total outstanding loans was only 14.5%, down from 31.2% in 2010, while the growth rate of household debt increased dramatically from 37.5% in 2010 to 54.9% in 2011. This may be due to a change in the statistical methodology of the SBV as discussed above.

Moreover, the proportion of household debt out of the total outstanding loans of the economy has been increasing recently, remaining at around 25-21% during 2000-2004, decreasing to around 18.55% in 2005 and gradually increasing over the years to around 21% in 2010, subsequently rising to 29% in 2011 (the sudden increase in 2011 as against 2010 can be explained by the adoption of an alternative statistical method). This upward trend continued to 38.44% in 2016.

Figure 7: Household Debt, GDP and Total Credit in Vietnam from 2000 to 2016



Source: SBV.

The increasing share of household debt out of total outstanding loans is in line with the fact that households have a tendency to borrow more for consumption (a more open view of borrowing for consumption, which is different from the traditional view where people purely spend their income rather than the borrow to spend). The share of household debt to GDP also tended to increase and the rate of increase is faster than the proportion of household debt to total debt. However, in the fourth quarter of 2016, this ratio was only 47%, which was quite low compared to other countries in the region.

4. Household Debts and Macroeconomic Factors in Vietnam

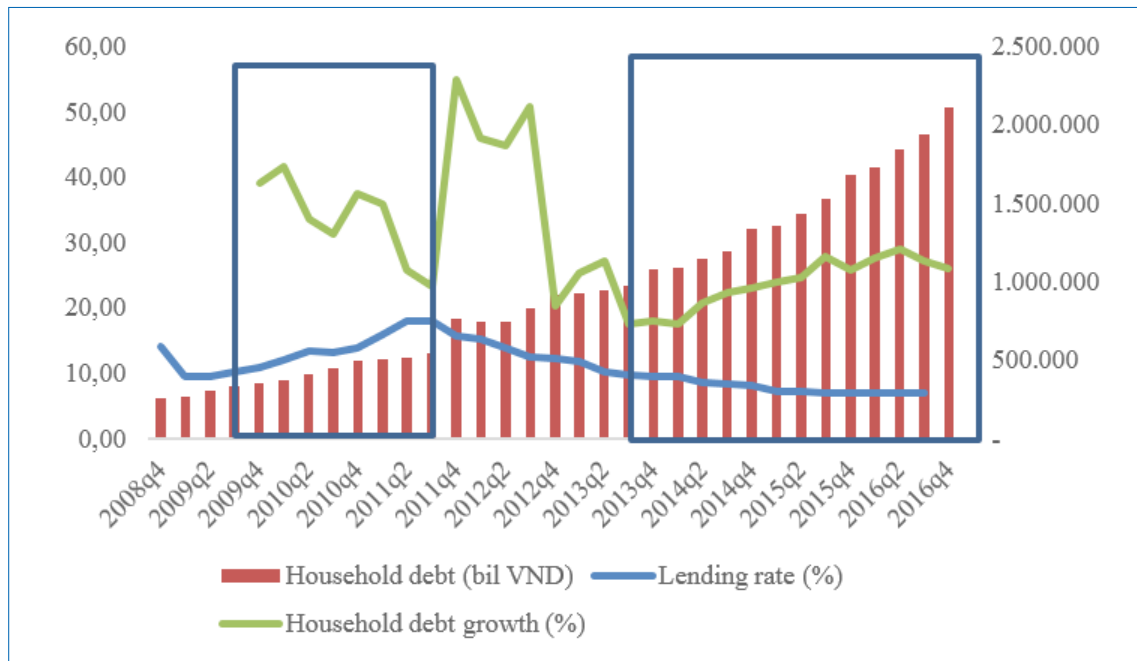
4.1 Interest Rate, Lending Condition and Household Debts

One of the strongest determinants of household debts is interest rates and lending conditions. With low interest rates and favorable lending conditions, household debts will increase. In contrast, high interest rates and the tightening of lending conditions are factors that slow down the household debt growth (Debelle, 2004).

In Vietnam, due to the high inflation, the SBV has had to tighten monetary policy during the period 2009-2011. This led to a widespread lack of liquidity throughout the system, prompting banks to enter an interest rate race. This was despite the SBV implementing several policies to curb interest rates. In addition, the State Bank implemented credit control measures such as setting the credit

growth limits for commercial banks, and limiting lending to non-manufacturing sectors (like real estate, securities, etc.) These measures subsequently led to the reduction of household debt growth in the period.

Figure 8: Lending Rate and Household Debt Growth¹



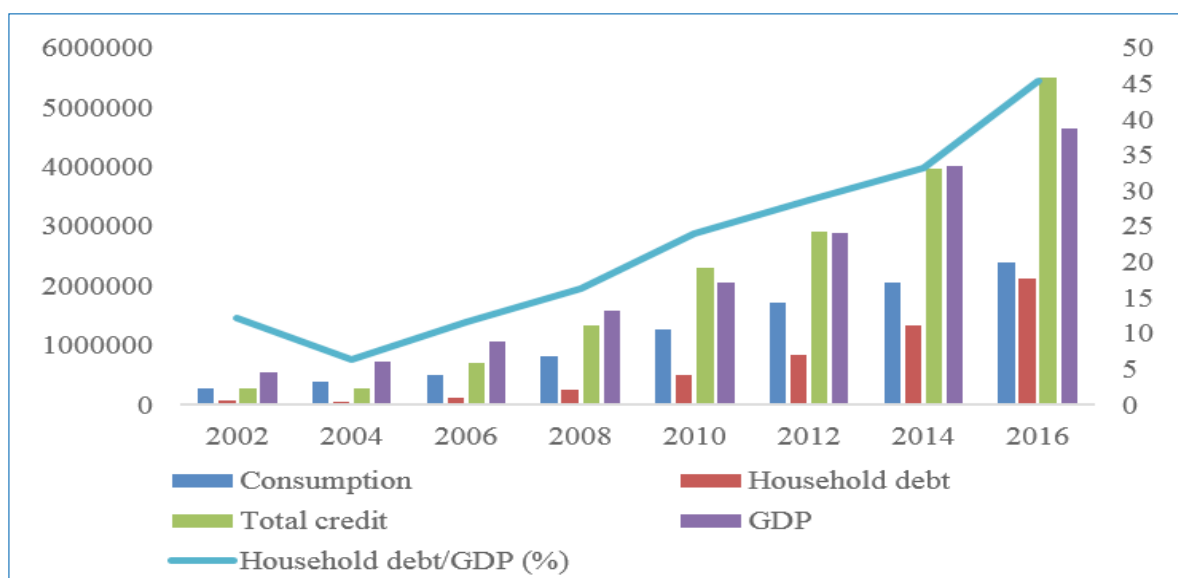
Source: SBV and IMF.

In the next period, interest rate gradually decreased in line with SBV's direction. Along with that, the macroeconomic indicators such as GDP and inflation have improved, creating momentum for banks to continue reducing interest rates to support businesses, thereby promoting growth. Restrictions on lending to non-manufacturing sectors set by government in the last period have also been loosened and removed. The SBV has coordinated with the Ministry of Construction to implement some solutions to restore the real estate market, culminating in a package of 30 trillion dong through refinancing with reasonable interest rates for credit institutions to lend to low income groups; those who have difficulties to purchase houses; and, the supply chain (four-party link) credit policy in the construction sector. The lower interest rate and easing of credit constraints have led to a substantial rise in household debt.

4.2 GDP Growth, Consumption and Household Debt

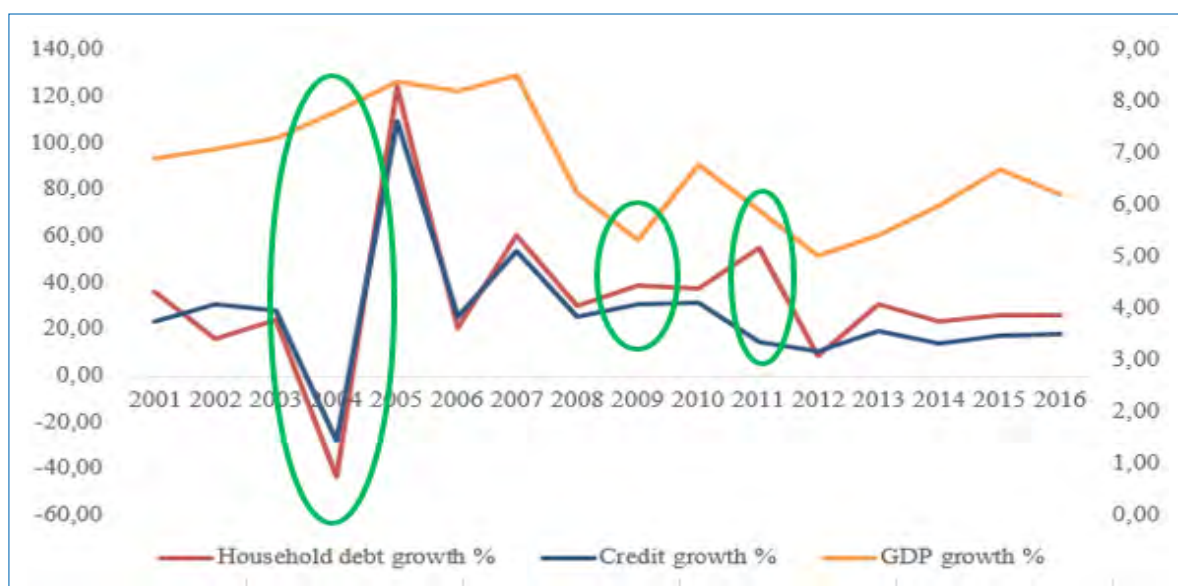
A rise in household debt initially increased consumption and hence promoted economic growth in Vietnam in the period 2000 – 2016. The GDP growth was in line with credit growth and household debt growth, albeit at a slower pace, leading up to a sustainable increase in household debt/GDP ratio, from 9.36% in 2000 to 45.46% in 2016. This rate showed that the Vietnamese people has increased borrowing. However, in comparison with other countries in the same region such as Thailand, Malaysia, Korea and Chinese Taipei (economies with household debt/GDP ratio exceeding 80%), this ratio in Vietnam is still relatively low.

1. Year-over-year growth, compares the quarter of one year to the same quarter of the previous year.

Figure 9: GDP, Consumption and Household Debt (billion VND)

Sources: GSO and SBV.

Generally, GDP growth is in line with credit growth and household debt growth. However, the chart for bank debt, credit and GDP growth, shows that at some point, these indicators do not move in the same direction, particularly in 2004, when the economic growth rate continued to increase over the previous year while the credit and household debt growth rate fell sharply to below 0% (see Figure 10). In 2009, both credit and household debt rose, but the pace of GDP growth continued to on a decreasing trend from the previous year. In 2011, household debt growth surged sharply against GDP growth and credit growth, leading to a sharp increase in the household debt/GDP ratio from 24.04% in 2010 to 28.39% in 2011. The main reason for this difference were the changes in the SBV's monetary policy and the effect of external factors. The table below gives more details about these differences.

Figure 10: GDP Growth, Credit Growth and Household Debt Growth

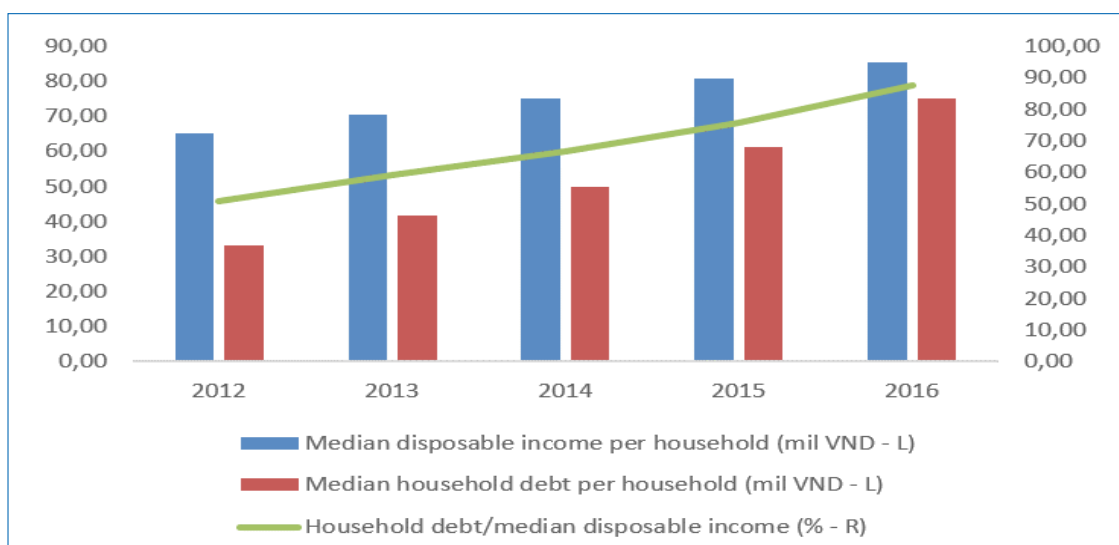
Source: GSO and SBV.

Table 1: Differences Between Movement of GDP, Credit and Household Debt

Time	Context	Differences	Reasons
2004	CPI increases sharply, causing the negative impact on economy	GDP growth ↑ Credit growth ↓ Household debt growth ↓	The SBV announced a decision to increase the required reserve ratio to closely control credit growth. Adjusting the required reserve ratio will lead banks to take a closer look, with stricter lending conditions to limit projects which require large capital but have low efficiency.
2009	Global Financial Crisis and the internal instability of economy	GDP growth ↓ Credit growth ↑ Household debt growth ↑	As an open economy, the global economic crisis has affected the Vietnamese economy, especially exports, investment and tourism. At the same time, high credit growth in the previous period, especially in 2007 when the credit growth increased to 52%, leading to high-inflation from the end of 2007 and late in 2008. To help economic recovery, in 2009 and 2010, SBV loosened monetary policy.
2011	Non-performing debt ↑, economic downturn	GDP growth ↓ Credit growth ↓ Household debt growth ↑	The State Bank of Vietnam controls credit growth at a low level. The economy is in a state of recession, leading to reduced investment opportunities for businesses. Thus, commercial banks turned their credit to households, and priority sectors.

4.3 Population, Income and Household Debt

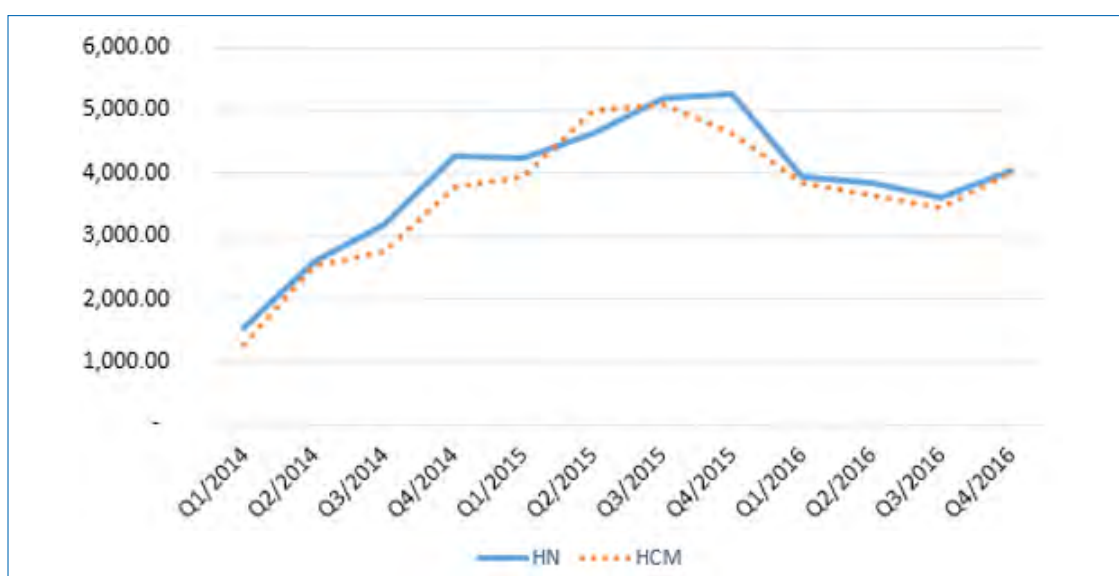
In the period 2012 – 2016, the disposable income per household increased, from 65 million VND to 85.48 million VND, one of the causes that boosted household debt per household, from 33.04 million VND to 74.97 million VND. However, household debt has not increased at the same rate as disposable income. In recent years, the household debt/disposable income ratio rose from 50.83% in 2012 to 87.71% in 2016. This trend shows a change in savings and consumption attitude of the Vietnamese. The rise in household debt is a motivation for the development of the household economy. However, the loan repayment burden would be evident if households do not use loans effectively.

Figure 11: Income and Household Debt

Source: SBV, Euromonitor.

5. Housing Market in Vietnam and its Relationship with Household Debt

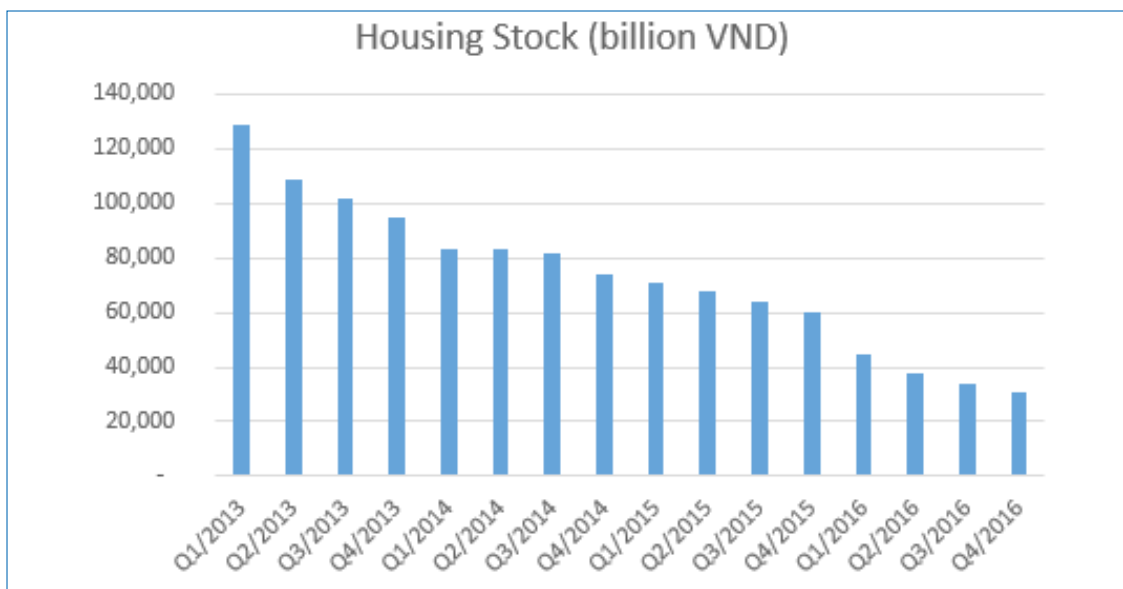
Since 1993, Vietnam has experienced three cyclical land developments which included 1-2 years of an overheating market, followed by 5-6 years of a frozen market. The first market boom took place in mid-1993 to 1994, when housing prices surged about tenfold. The second cycle took place from 2000 towards the end of 2003, when housing prices increased rapidly and peaked in Q2 2001 and the average price increased five times, mainly due to speculative activities. Vietnam's real estate prices in comparison with the world average was relatively high and even higher than several megacities in developed countries. The third period occurred from 2007 to early 2008. During this period, real estate in Ho Chi Minh (HCM) City underwent rapid growth in price which was different from previous periods when market boom was mainly observed in Hanoi.

Figure 12: Number of Housing Transactions in Hanoi and Ho Chi Minh City

Source: Savills.

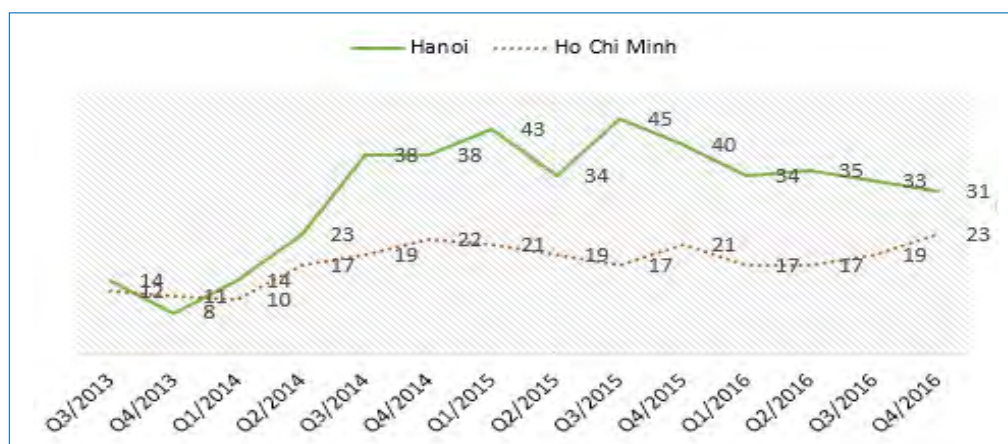
Over 2014 - 2016, the number of transactions in the Hanoi and Ho Chi Minh City markets correlated to each other and were quite inactive in the first few months of 2014. Subsequently, these numbers increased significantly towards the end of 2015 and showed signs of decline in 2016 (See Figure 12). The most active period was at the end of 2015, when the number of transactions in Q4 2015 in Hanoi recorded 5,270 thousand transactions and that of HCM City market amounted to 5,100 thousand transactions in 2015 Q3.

Figure 13: Housing Stock in Vietnam



Source: Savills.

Meanwhile, real estate inventory fell sharply, from 128.548 billion dong in 2013 to 31.032 billion dong by the end of 2016 (See Figure 13). The economy has gradually recovered and the real estate market has seen positive changes from 2013 to 2016. The main reason was that since 2013, public investments have been supplemented to stimulate economic recovery. In addition, a series of legal documents related to real estate market was issued to resolve some difficulties in this area, specifically the issue of real estate inventory. The new regulations of the Law on Housing 2014, the Law on Real Estate Trading 2014 and the guiding documents have created more favorable conditions to attract domestic and foreign investments in developing real estate markets. In particular, the improvement of policies on social housing development and management is one of the breakthroughs, contributing to the restructuring of the real estate market, creating favorable conditions for policy beneficiaries. The poor and low-income earners have been able to improve their housing conditions, contributing to improved social security and promoting socio-economic development. Another reason is that the composition of real estate was adjusted more reasonably towards real demand and real payment capacity of the market. The commodity structure is increasingly diversified in both types and product segments to meet the various needs of the people and society. Material and technical foundations have been set up to promote economic development. Credit also has an impact on the reduction of real estate inventory; in particular, credit in the real estate sector continues to grow, even at higher rates than the overall credit growth of the system. By the end of 2016, outstanding loans of real estate trading were 436.144 billion dong, up 11.03% compared to 2015.

Figure 14: Rate of Absorption in Hanoi and Ho Chi Minh City

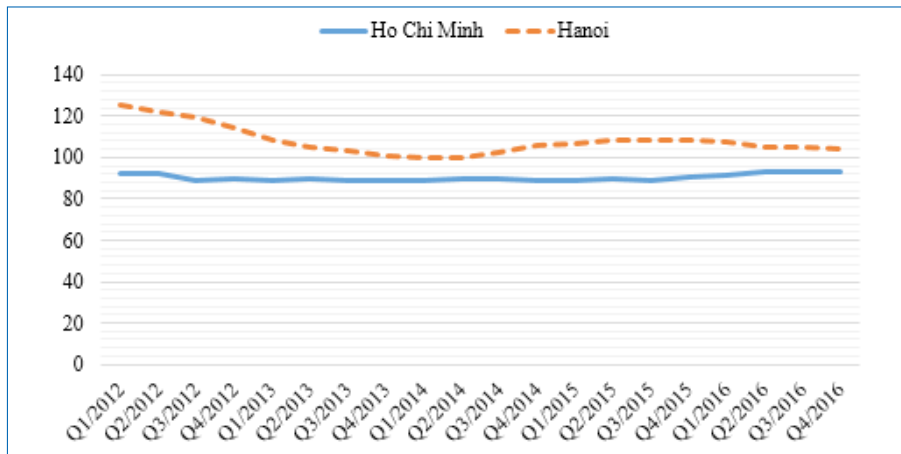
Source: Savills.

Absorption rates² in 2013 in Hanoi and Ho Chi Minh City tend to be comparatively similar, with the figures being recorded at 14% and 12% respectively before the gap between two areas gradually widened. Absorption rates in HCMC fluctuated between 17% and 21% during the 2014 – 2016 period, with its overall highest point of 23% in Q4 2016. The Hanoi market witnessed more fluctuations in the absorption rate, hitting a trough of 8% in Q3 2013, followed by a significant rebound and peaked at 45% in Q3 2015. The real estate market froze from the end of 2013 as a result of the global financial crisis. The real estate market started to show some signs of recovery in early 2014, particularly in the number of transactions, along with a series of positive supporting policies (HN had 11,450 successful transactions, an increase of 200% compared to 2013. In HCMC, 10,350 transactions were successful, up 30% over 2013). On top of that, stable real estate prices were recorded, real estate inventories continued to fall, and real estate composition shifted in a rational way (projects shifted from commercial housing to social housing and adjustable apartment design) to meet market demand. Specially, real estate credit (14%) was even higher than total credit growth (13%). In 2015, the growth in real estate continued to recover. However, from 2016, the rate of absorption in Hanoi had gradually decreased, and the gap between the absorption rate between Hanoi and Ho Chi Minh City had narrowed. On horizon, if the real estate market does not fluctuate too much by policy or economic impact, the absorption rate between Hanoi and Ho Chi Minh City will move in the same trend.

House price indices reflect the level of price movement of real estate through successful transactions over time. These indices are announced by mainly market research companies and several real estate exchanges for a specific location and a number of market segments. House price index data is limited in scope, available mainly through the development of real estate price indices in “standardized” market segments such as apartments for sale and for rent and offices for lease. As for the individual housing market and land prices, no state management agencies or real estate companies have calculated this price index. The main reason is due to limited sources of information and data pertaining to housing prices. Another reason is that there have been very few transactions. Besides, there is no functional agency that collects and stores statistical data on real estate transaction prices as well as their characteristics in a complete and accurate manner, leading to some limitations in constructing the house price index.

2. The absorption rate is the rate at which available homes are sold in a specific real estate market during a given time period. It is calculated by dividing the average number of sales per month by the total number of available homes.

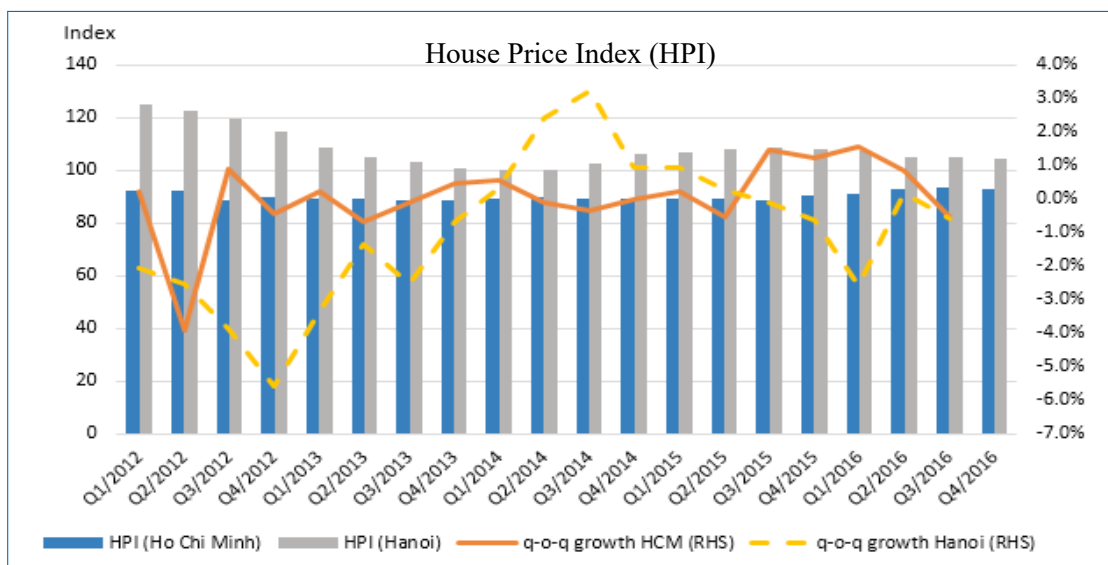
Figure 15: House Price Index in Hanoi and Ho Chi Minh City



Source: Savills.

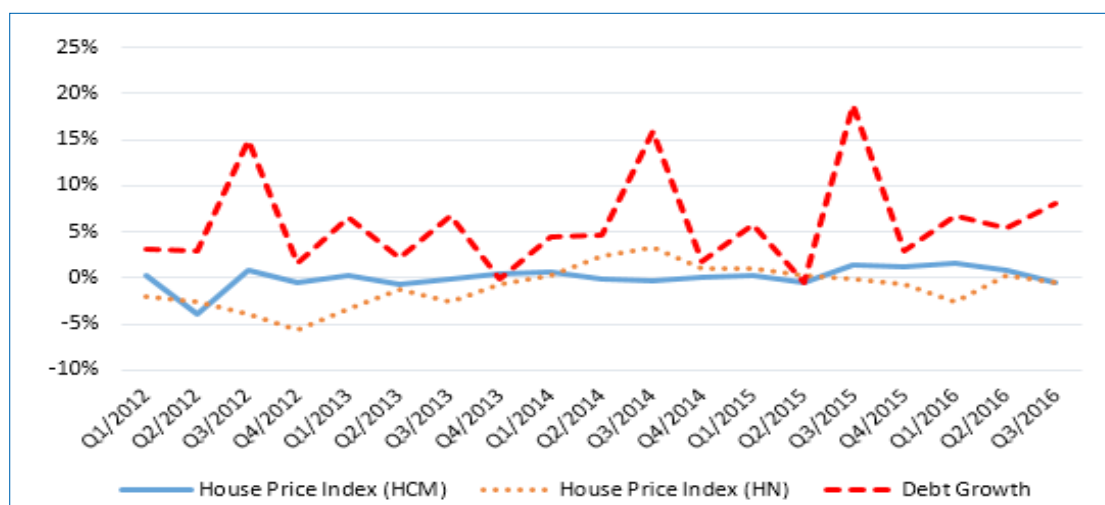
As is illustrated from the house price indices both in Hanoi and HCM city, house prices in HCMC tend to be higher and more volatile than house prices in Hanoi. However, the fluctuation of the house price index is not too volatile. In HCM, the price index reached its peak of 125 points in Q1 2012, and then gradually declined to 100 points in Q1 2014. From that time onwards, the index has gone through a slight rather than wild fluctuations. In the Hanoi market, the house price index only hovered around 89 to 93 points and witnessed no significant changes. This can be accounted for by the fact that the economic situation during the 2014-2016 period was quite stable, which, in turn, had no strong effect on the real estate market.

Figure 16: House Price Index and its Growth Rate in Hanoi and Ho Chi Minh City



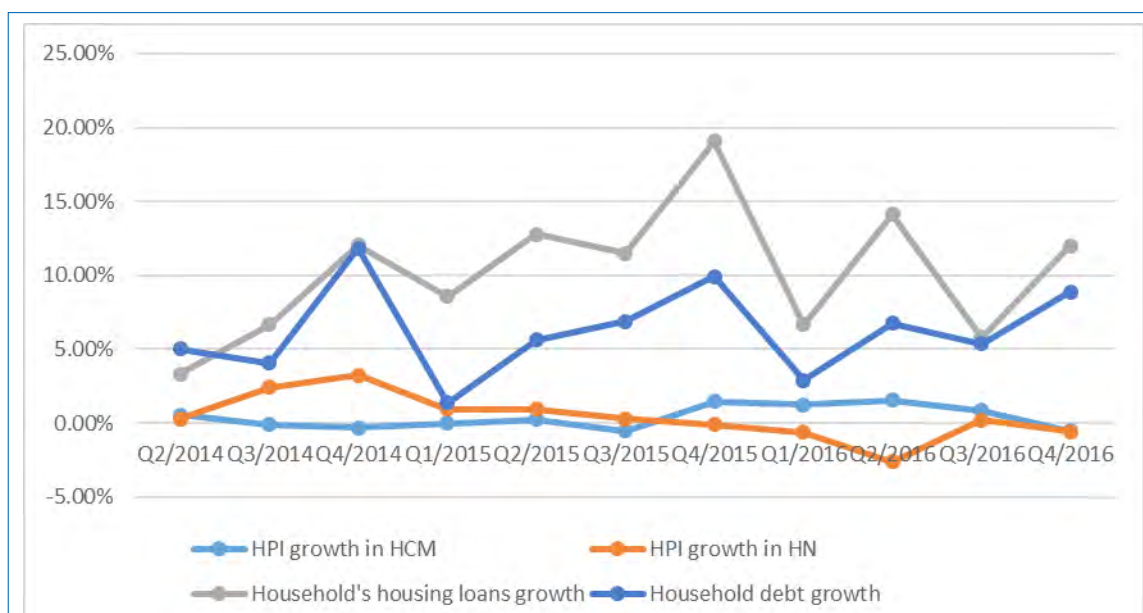
Source: Savills.

House price indices in both Hanoi and Ho Chi Minh City were volatile on a quarter by quarter basis, fluctuating between -3.9% and 1.5% for HCMC and -5.6% to 3.2% for Hanoi. The charts indicate that price fluctuations in Hanoi was more volatile than in HCM. House price fluctuations have a direct impact on the value of the homeowners' properties. Increased home prices mean that the value of material possessions of homeowners have increased. The majority of the wealthiest in Vietnam are from the real estate industry.

Figure 17: Growth of House Price Index and Debt Growth

Source: SBV, Savills.

In Vietnam, household loans are mostly mortgaged. Therefore, house prices play a significant role in changes in the volume of debt. As housing prices increase, households are inclined to consume more and borrow more. The chart shows that the relationship between changes in the housing price index and household credit growth are interrelated, especially during financial crisis period when house prices went down.

Figure 18: Growth Rate of Household Debt, Household's Housing Loans and Housing Price Index from Q2/2014 to Q4/2016

Source: SBV, Savills.

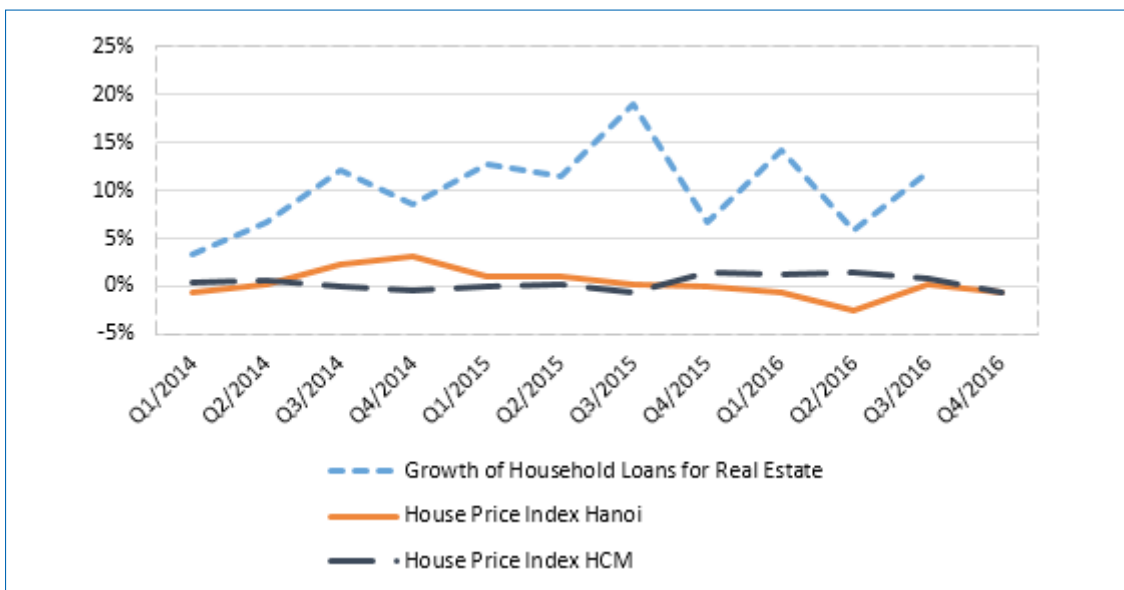
In addition, we have also added outstanding debt related to cost of repair and purchase of houses for living, for sale and for rent (quarterly figure from Q2/2014), and lending for real estate business. The researchers used this data as the total outstanding household real estate debt to illustrate the relationship between real estate and household debt.

According to the illustrated graph (quarterly data, quarter-on-quarter growth rate), the growth rate of household real estate loan followed a similar pattern with the increasing household debt but at a slower pace (less than 10%), while the growth rate of household debt is usually over 10%. The graph also shows that there is no strong correlation between the increase in household debt, real estate debt and housing price indexes in both Hanoi and Ho Chi Minh city.

The proportion of outstanding real estate loans in total outstanding loans tended to increase rapidly (from 16% in early 2014 to 25% in 4/2016). This increase is also in tandem with the recent trend of households who tend to buy houses for living (due to actual demand, especially in big cities). This increase also reflects the government’s policy to encourage housing loans in recent years to revive the real estate market after a period of freeze, thereby stimulating other production areas, such as construction, production of building materials and so on to promote economic growth.

As shown in the chart below, while the proportion of outstanding real estate loans has been on the rise, real estate loans/total outstanding loans declined from 8.6% in Q1/2014 to under 1% in Q4/2016. This also represents the success of government management and SBV in the issuance of regulations and policies to limit real estate market to prevent the formation of a real estate asset bubble.

Figure 19: Growth of Household Loans for Real Estate and House Price Index



Source: State Bank of Vietnam, Savills.

The chart also confirms a positive correlation between the growth of household debt for real estate purposes and the housing price index over the majority of the period shown. However, the growth of outstanding loans reached its highest rate in Q3 2015 with an increase of 19% compared to the previous quarter, while the index of housing prices remained almost unchanged at this time. The absorption rate for 2015 Q3 in Hanoi also reached the highest rate of 45% while the figure for HCMC was less significant, at 19%.

6. Conclusion

Although household debt levels in Vietnam remain under control, it is envisaged that they will continue to increase in the coming years and the proportion of household debt/GDP is inclined to increase. However, this percentage is still below 60%, lower than other countries in the region. In addition, the proportion of outstanding real estate business loans/total outstanding loans has tended to decrease, while the proportion of real estate debt balance of households/total debt has increased, indicating that the increase in outstanding loans in the real estate sector was mainly due to the increase in debt by households rather than the real estate business. This also depicts that credit continues to flow into the production sector, contributing to economic growth and there is less worry about the possibility of a real estate bubble in Vietnam.

Due to the impact of the global financial crisis and the loosening of monetary policy in general, more households in Vietnam are turning to consumption patterns through debt financing, and tend to invest in real estate in the context of rising housing prices. The trend towards new consumer products amongst the youth has also accelerated consumer lending. In addition, the lower interest rate and easing of credit constraints have led to a substantial rise in household debt.

In the current period, household debt in Vietnam is on an increase, and this only represents the outstanding portion of loans in credit institutions while it is customary in Vietnam for consumers to borrow from relatives, friends and possibly borrow from the black credit segment. Therefore, in addition to controlling the credit of household debt in credit institutions to ensure the appropriate use of capital, Vietnam needs to have household debt statistics outside the formal credit institutions in order to have a comprehensive and in-depth evaluation of household debt, from which the government can formulate more effective policies.

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