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GLOBAL TRADE CYCLE AND FINANCIAL CYCLE IN VIETNAM ECONOMY

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Abstract

Objective:

The paper investigates the jointly dynamics of international trade cycle and financial cycle in the Vietnam economy. The data is a time-series sample of Vietnam economy over the 1995-2021 time period. And the research objective is to analyze the co-movement of foreign trade and financial cycle, incorporating the recent Covid-19 pandemic.

Methodology:

The research methodology combines both qualitative analysis with quantitative one. In particular, the qualitative analysis reviews the recent literature on the global trade and financial cycle, with a focal point on the developing economies. Then, the quantitative analysis considers the time-series analysis of Vietnam economy, as one typical small open economy.

Findings:

The global trade and financial cycle are considered as a central role within the current international monetary system. The trade cycle can be effective in the short and medium term while the financial cycle exists for a longer term. In the Vietnam economy, the trade and financial cycle co-moves closely, especially during the time period of structural break such as Covid-19 pandemic.

Implications:

The results uncover that the public policy needs to be adjusted according to the points in the global trade and financial cycle. The policy at the peak of cycle can be tightened while the policy at the trough of cycle needs to be expanded. And the policy at both the peak and trough needs to be accompanied with an excellent communication to the whole economy.

Keywords: Global Trade Cycle; Financial Cycle; Quantitative Analysis; Qualitative Analysis; Vietnam economy.

INTRODUCTION

Global trade and financial cycle are at the central point of recent discussion on the international integration, based on a well-established background with both their theoretical and empirical evidence (Borio, 2014). Rey (2016) prove that there exist a global financial cycle which affects both the trading and credit supply of economies in the world, and Obstfeld et al (2019) and Obstfeld (2020) show that the exchange rate fluctuation can create a channel for one economy to absorb the external shocks coming from the global cycles.

Recently, Miranda-Agrippino and Rey (2020) detects there exist common factors causing the co-movement of various macroeconomic variables on the global scale, i.e, a global cycle. Their evidence records that the United States economy plays a central role in the global financial cycle, which works through the exchange rate fluctuation and international credit supply as well as cross-border capital flows. And the China economy determines mostly the global trade cycle through its large impact on the world commodity and exports as well imports of goods and services.

With an in-depth international integration, with the trade openness of about 184% in 2021, the Vietnam economy is affected directly by the external shocks originating from the world. Therefore, understanding the trade and financial cycle in the Vietnam economy, then, the comparison if these cycles with the global cycles are important for both the academic and policy discussion.

The current paper investigates the trade and financial macroeconomic variables in the Vietnam economy and compares them with their global counterparts. In particular, the foreign trade is captured by the exports and imports per gross domestic product (GDP), while the finance is illustrated by the domestic credit supply to the private sector per GDP.

In the Vietnam economy, the trade and financial cycle co-moves closely, and both can have lagged effects on the domestic economic growth rate. Compared with the global trade and financial cycle, illustrated by the east Asia & pacific and the world economy, there exists a difference between domestic and global cycle.

The domestic credit supply only has a common tendency with the global one *after* the 2008 world financial crisis while the domestic exports and imports only have a common tendency with the global one *before* the 2008 crisis.

The paper is structured as follows. After the first section in the Introduction, the second section on the Analysis framework presents the data and method. Then, the third section on empirical evidence investigates the trade and financial cycles in the Vietnam economy compared with the world. Then, the fourth section concludes.

ANALYSIS FRAMEWORK

We employ a quantitative analysis method that is based on the correlation between the foreign trading value and financial indicators with the real economy. The correlation, by definition, measures the co-movement of these variables over time, then can capture the existence of the trade and financial cycle in the Vietnam economy. Moreover, we also compute the cyclical component of the trading and financial variables by using the Hodrick – Prescott (HP) filter. The cyclical component is the variation of one variable from its trend value.

In detail, we measure the foreign trading cycle by the value of total exports and imports per gross domestic product (GDP) in percentage. The financial cycle is measured by the value of domestic credit to the private sector per GDP, also on percentage. And the real economy is measured by the growth rate of the real gross domestic product in constant 2010 national price.

For the data, we collect the sample from various sources. In particular, the exports and imports per GDP percentage are from the Vietnam General Statistic Office (GSO, 2022). The domestic credit to the private sector percentage is from the State Bank of Vietnam (SBV, 2022). And the economic growth rate on percentage is from the Vietnam GSO (2022).

We also collect the data for the East Asia & Pacific economies and world economies. These variables illustrate the tendency of the rest of the world, then,

show the global trade and financial cycle. The data is from world development indicators.

EMPIRICAL EVIDENCE

Table (1) shows the correlation result of trading and financial variables in our data sample. First, the correlation of credit supply with the exports and imports are both positive, with a quite high value, being 0.92 and 0.85 respectively. This high correlation predicts that there can be a co-movement of the trading cycle and financial cycle in the Vietnam economy. Another important feature is that the correlation of economic growth with the credit supply, exports, and imports are all negative. This value can suggest that these trading and financial variables can have a lagged effect on economic growth, thus, resulting in a negative relationship.

Table 1: Correlation of Variables

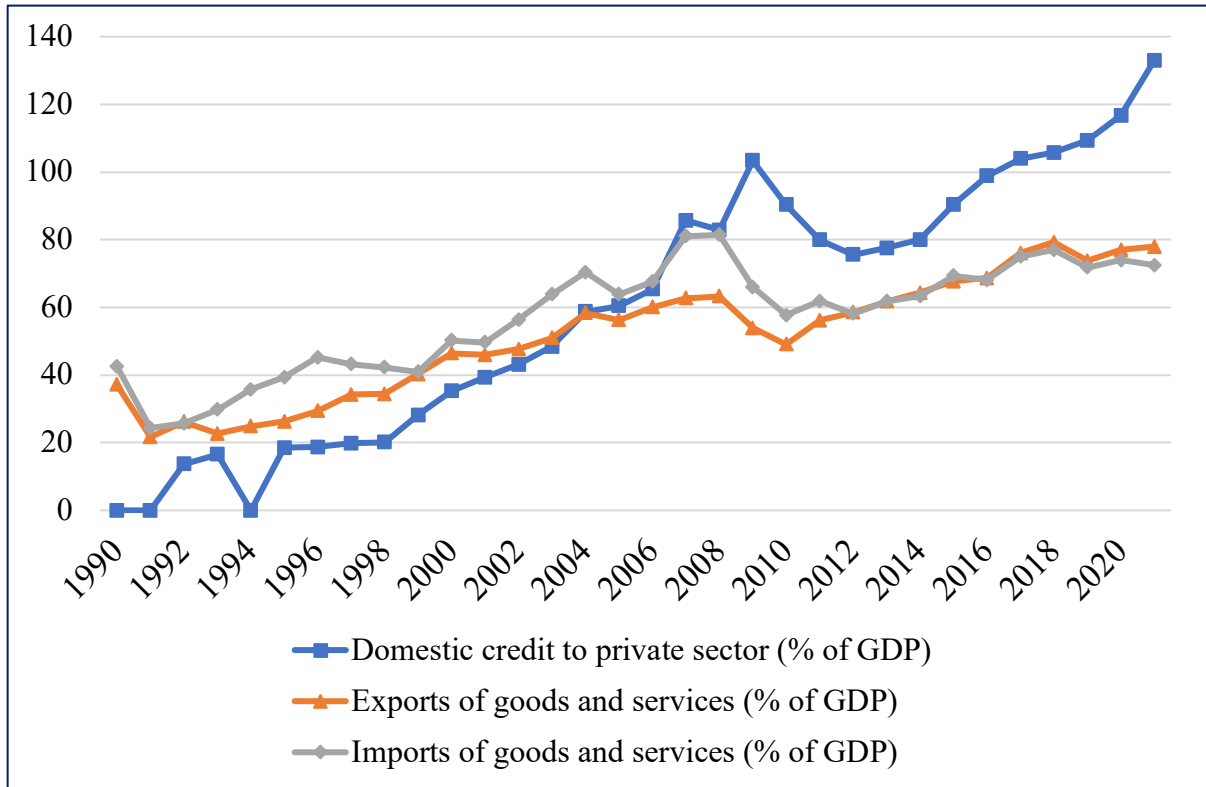
Variables	Credit	Exports	Imports	Growth
Credit	1.00			
Exports	0.92	1.00		
Imports	0.85	0.92	1.00	
Growth	-0.57	-0.54	-0.40	1.00

Source : Author’s calculation from data sample.

Next, we examine the dynamic tendency of credit supply and foreign trade over the 1990-2021 period.

Figure (1) shows that the domestic credit to the private sector as a percentage of GDP tends to go up over time. It reached 100% in 2010, then, nearly 140% in 2021. During this period, both the exports and imports raise over time but with a switching regime. Before 2008, these trading variables moves closely with the credit supply, but right after 2008, their increases are significantly lower than the increase in credit supply. The imports after 2008 are even lower than their peak in 2008, while the exports gets their peak in 2021.

Figure 1 : Credit Supply, Exports and Imports in Vietnam Economy

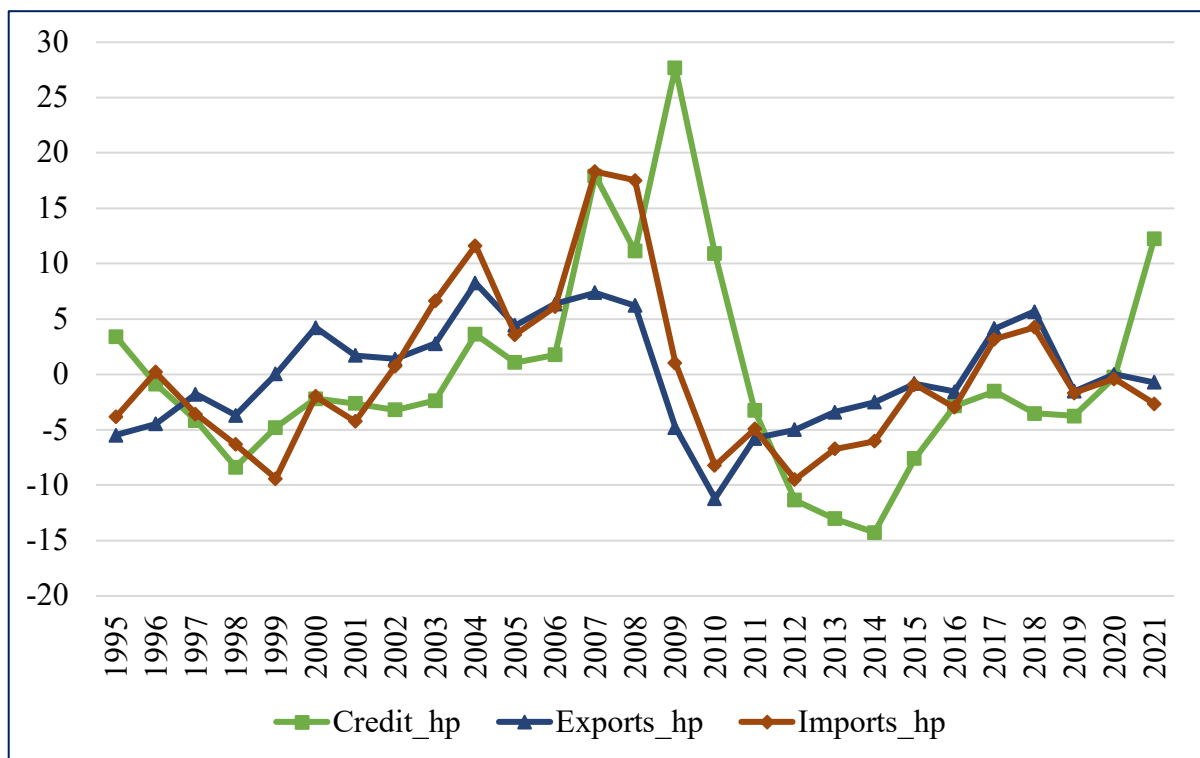


Source : Vietnam General Statistic Office (GSO, 2022).

Another approach to examining the co-movement of trading and financial variables is the use of cyclical components. Figure (2) records that there exists a quite strong related movement of these variables. During the 1995-2009 period, the credit has an increasing variation around its trend, with a peak of cyclical movement at nearly 27% in 2010. Both the exports and imports follow a similar pattern over the same period. And after 2010, these variables reduce substantially their cyclical variations. The overall tendency is that these trade and financial variables tend to move closely with each other during the 1995-2021 period.

Next, we detect the existence of the co-movement of domestic and foreign trading and financial variables.

Figure 2: Foreign Trading and Financial Cycle in Vietnam's Economy

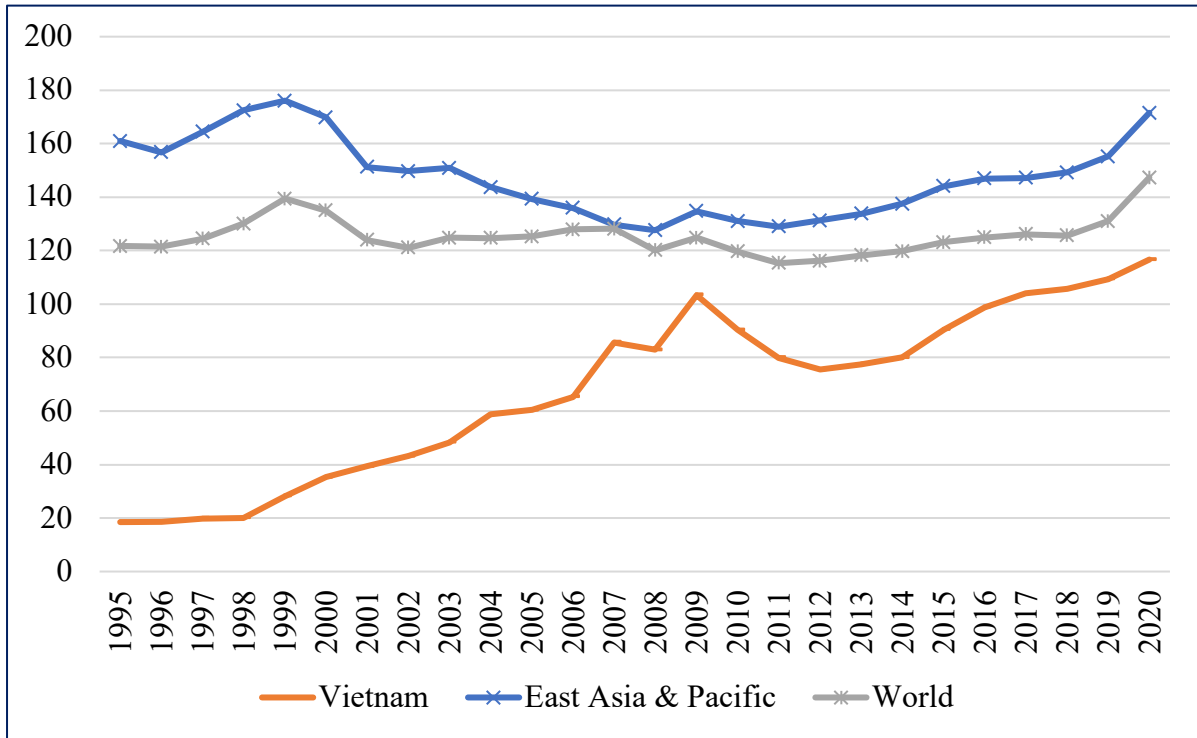


Source : Author's calculation from data sample.

Figure (3) focuses on the domestic credit to the private sector per GDP. There exist different patterns of domestic and foreign credit supply over the 1995-2009 period. The credit supply of Vietnam's economy tends to increase over time while that of east Asia and the pacific as well as the world economy goes down. But over the next period of 2008 – 2021, these three variables increase together. And during the 1995-2021 period, the credit supply per GDP of east Asia & pacific, and the world economy is always higher than the corresponding value of Vietnam's economy. In recent years, the gap between these variables tends to be lower over time.

Overall, the increase of east Asia and pacific and world credit supply after 2008 can be a recovery to its high level in the 1990s. But the increase of credit supply in the Vietnam economy tends to follow one uniform pattern, not depending on the global financial crisis in 2008.

Figure 3 : Domestic Credit to Private Sector per GDP (%)



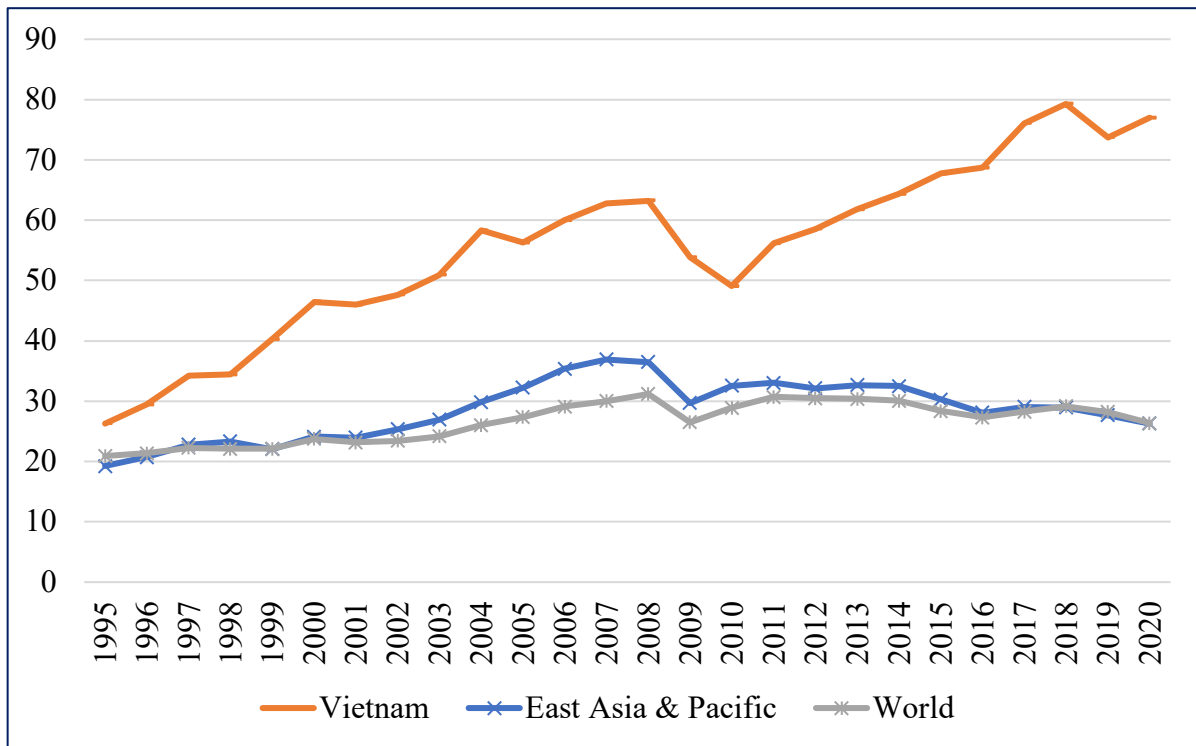
Source : World Development Indicators (2022).

The next figures record the foreign trading variables. Figure (3) focuses on the exports per GDP while Figure (4) shows the imports per GDP. The exports and imports of Vietnam's economy tend to increase over time. This tendency contradicted that of east Asia & pacific and the world economy since their exports and imports tend to go down after 2011.

Moreover, the value of exports per GDP and imports per GDP of Vietnam's economy is always higher than the east Asia & pacific, and world economy. This second feature proves that the economic openness of Vietnam's economy is much larger than that of east Asia & pacific and the world economy.

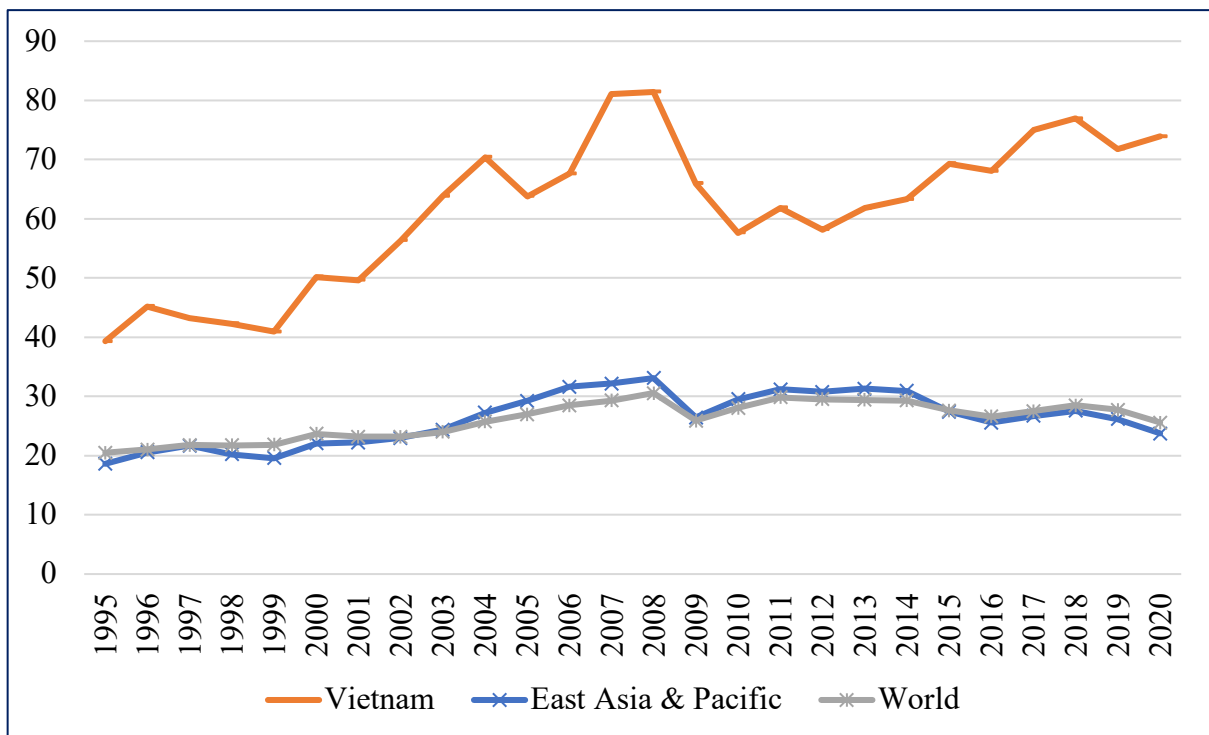
In summary, the evidence uncovers two main key features of trade and financial cycles in the Vietnam economy. First, there exists a closed movement of trade and financial variables in Vietnam. And second, these variables are relevant but do not move closely with the global economy, proxied by the east Asia & pacific and world economies.

Figure 3 : Exports per GDP (%)



Source : World Development Indicators (2022).

Figure 4 : Imports per GDP (%)



Source : World Development Indicators (2022).

CONCLUSION

The paper investigates the joint dynamics of the international trade cycle and financial cycle in the Vietnam economy. The data is a time-series sample of Vietnam's economy over the 2005-2021 time period. And the research objective is to analyze the co-movement of foreign trade and the financial cycle, incorporating the recent Covid-19 pandemic.

The global trade and financial cycle are considered as a central role within the current international monetary system. The trade cycle can be effective in the short and medium term while the financial cycle exists for the longer term. In the Vietnam economy, the trade and financial cycle co-moves closely, and both can have lagged effects on the domestic economic growth rate.

In comparison with the global trade and financial cycle, illustrated by the east Asia & pacific and world economy, there exists a difference between domestic and global cycles. The domestic credit supply only has a common tendency with the global one *after* the 2008 world financial crisis while the domestic exports and imports only have a common tendency with the global one *before* the 2008 crisis.

The results uncover that public policy needs to be adjusted according to the points in the global trade and financial cycle. The policy at the peak of the cycle can be tightened while the policy at the trough of the cycle needs to be expanded. And the policy at both the peak and trough needs to be accompanied by excellent communication with the whole economy.

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